10/ 567,660

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TERMINAL (ENTER 1, 2, 3, OR ?):2

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NEWS 1		Web Page URLs for STN Seminar Schedule - N. America
NEWS 2	JAN 08	CHEMLIST enhanced with New Zealand Inventory of Chemicals
NEWS 3	JAN 16	CA/CAplus Company Name Thesaurus enhanced and reloaded
NEWS 4	JAN 16	IPC version 2007.01 thesaurus available on STN
NEWS 5	JAN 16	WPIDS/WPINDEX/WPIX enhanced with IPC 8 reclassification data
NEWS 6	JAN 22	CA/CAplus updated with revised CAS roles
NEWS 7	JAN 22	CA/CAplus enhanced with patent applications from India
NEWS 8	JAN 29	PHAR reloaded with new search and display fields
NEWS 9	JAN 29	CAS Registry Number crossover limit increased to 300,000 in multiple databases
NEWS 10	FEB 15	PATDPASPC enhanced with Drug Approval numbers
NEWS 11	FEB 15	RUSSIAPAT enhanced with pre-1994 records
NEWS 12	FEB 23	KOREAPAT enhanced with IPC 8 features and functionality
NEWS 13	FEB 26	MEDLINE reloaded with enhancements
NEWS 14	FEB 26	EMBASE enhanced with Clinical Trial Number field
NEWS 15	FEB 26	TOXCENTER enhanced with reloaded MEDLINE
NEWS 16	FEB 26	IFICDB/IFIPAT/IFIUDB reloaded with enhancements
NEWS 17	FEB 26	CAS Registry Number crossover limit increased from 10,000 to 300,000 in multiple databases
NEWS 18	MAR 15	WPIDS/WPIX enhanced with new FRAGHITSTR display format
NEWS 19	MAR 16	CASREACT coverage extended
NEWS 20	MAR 20	MARPAT now updated daily
NEWS 21	MAR 22	LWPI reloaded
NEWS 22	MAR 30	RDISCLOSURE reloaded with enhancements
NEWS 23	APR 02	JICST-EPLUS removed from database clusters and STN
NEWS 24	APR 30	GENBANK reloaded and enhanced with Genome Project ID field
NEWS 25	APR 30	CHEMCATS enhanced with 1.2 million new records
NEWS 26	APR 30	CA/CAplus enhanced with 1870-1889 U.S. patent records
NEWS 27	APR 30	INPADOC replaced by INPADOCDB on STN
NEWS 28	MAY 01	New CAS web site launched

NEWS EXPRESS NOVEMBER 10 CURRENT WINDOWS VERSION IS V8.01c, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 25 SEPTEMBER 2006.

NEWS HOURS	STN Operating Hours Plus Help Desk Availability
NEWS LOGIN	Welcome Banner and News Items
NEWS IPC8	For general information regarding STN implementation of IPC 8

Enter NEWS followed by the item number or name to see news on that specific topic.

10/ 567,660

* * * * * * * * * * * * * * * * STN Columbus * * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 11:51:17 ON 07 MAY 2007

=> file reg
COST IN U.S. DOLLARS

	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'REGISTRY' ENTERED AT 11:51:54 ON 07 MAY 2007
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Property values tagged with IC are from the ZIC/VINITI data file
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STRUCTURE FILE UPDATES: 6 MAY 2007 HIGHEST RN 934336-20-6
DICTIONARY FILE UPDATES: 6 MAY 2007 HIGHEST RN 934336-20-6

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TSCA INFORMATION NOW CURRENT THROUGH December 2, 2006

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on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

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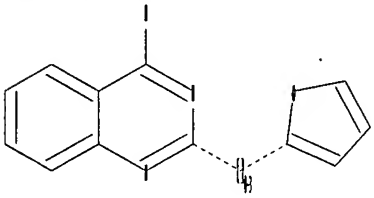
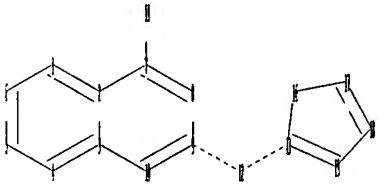
Uploading C:\Program Files\Stnexp\Queries\10567660.str





chain nodes :
11 12
ring nodes :
1 2 3 4 5 6 7 8 9 10 13 16 17 18 19
chain bonds :
7-11 9-12 12-13
ring bonds :
1-2 1-6 2-3 2-7 3-4 3-10 4-5 5-6 7-8 8-9 9-10 13-16 13-19 16-17 17-18
18-19
exact/norm bonds :
7-11 9-12 12-13
exact bonds :
13-16 13-19 16-17 17-18 18-19
normalized bonds :
1-2 1-6 2-3 2-7 3-4 3-10 4-5 5-6 7-8 8-9 9-10
isolated ring systems :
containing 1 : 13 :

10/ 567,660

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:CLASS 12:CLASS 13:Atom 16:Atom 17:Atom 18:Atom 19:Atom

L1 STRUCTURE UPLOADED

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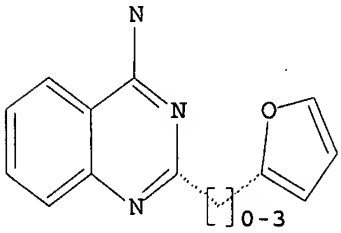
L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l1 sample
SAMPLE SEARCH INITIATED 11:52:18 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 5 TO ITERATE

100.0% PROCESSED 5 ITERATIONS 2 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 5 TO 234
PROJECTED ANSWERS: 2 TO 124

L2 2 SEA SSS SAM L1

=> s l1 ful
FULL SEARCH INITIATED 11:52:23 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 157 TO ITERATE

100.0% PROCESSED 157 ITERATIONS 104 ANSWERS
SEARCH TIME: 00.00.01

L3 104 SEA SSS FUL L1

=> file zcaplus
COST IN U.S. DOLLARS SINCE FILE ENTRY TOTAL SESSION
FULL ESTIMATED COST 172.10 172.31

FILE 'ZCAPLUS' ENTERED AT 11:52:30 ON 07 MAY 2007

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FILE COVERS 1907 - 7 May 2007 VOL 146 ISS 20
FILE LAST UPDATED: 6 May 2007 (20070506/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

```
=> s l3
L4          40 L3

=> d his

     (FILE 'HOME' ENTERED AT 11:51:17 ON 07 MAY 2007)

     FILE 'REGISTRY' ENTERED AT 11:51:54 ON 07 MAY 2007
L1              STRUCTURE UPLOADED
L2            2 S L1 SAMPLE
L3          104 S L1 FUL

     FILE 'ZCAPLUS' ENTERED AT 11:52:30 ON 07 MAY 2007
L4           40 S L3

=> d l4 1- ibib abs hitstr
YOU HAVE REQUESTED DATA FROM 40 ANSWERS - CONTINUE? Y/(N):y

L4   ANSWER 1 OF 40  ZCAPLUS  COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:         2006:655778  ZCAPLUS
DOCUMENT NUMBER:          145:124592
TITLE:                    Preparation of quinazoline derivatives for the
                          treatment and prevention of diabetes and obesity
INVENTOR(S):              Lee, Nam Kyu; Lee, Jun Won; Lee, Sukho; Im, Guang-Jin;
                          Han, Hye Young; Kim, Tae Kon; Kim, Yong Hyuk; Kwak,
                          Wie-Jong; Kim, Sang Woong; Ha, Joohun; Kim, Eon Kyum;
                          Lee, Jung Kyu; Yoo, Choong Yeul; Lee, Dae Yeon
PATENT ASSIGNEE(S):       SK Chemicals, Co., Ltd., S. Korea; Leadgenex Inc.;
                          Industry Academic Cooperation Foundation of Kyunghee
                          University
SOURCE:                   PCT Int. Appl., 163 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.           KIND   DATE        APPLICATION NO.        DATE
     ---------------      ----   --------    --------------------   --------
     WO 2006071095         A1    20060706    WO 2005-KR4664         20051230
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KZ,
             LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ,
             NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG,
             SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN,
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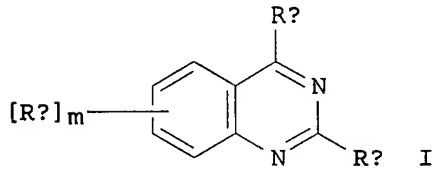
YU, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
KR 2006079121 A 20060705 KR 2005-134722 20051230
PRIORITY APPLN. INFO.: KR 2004-117708 A 20041231
OTHER SOURCE(S): MARPAT 145:124592
GI



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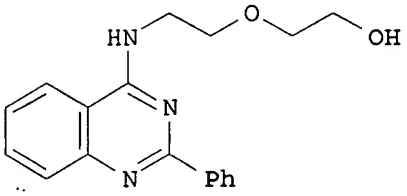

II

AB The invention is related to the preparation of quinazolines I [Ra, Rb= independently H, (un)substituted alk(en/yn)yl, hetero/aryl, etc.; m = 0-4; each Rc = independently H, halo, CF3, CN, OH, SH, NH2, (un)substituted hetero/aryl, alkylthio, alkanoyloxy, etc.; any identical or different substituents of hetero/aryl or heterocyclyl of Rc may bond with each other to form -CH:CH-CH:CH-, -N:CH-CH:CH-, -CH:CH-O-, -S-CH:CH-, etc.] (e.g., II), and their pharmaceutically acceptable salts, that are effective in lowering blood glucose level and body weight, and to their use as active ingredients in pharmaceutical compns. useful for treatment and/or prevention of diabetes and/or obesity. Four general prepns. are given. An increase of AMPK activity was observed when the C2C12 muscle cells were treated with quinazolines I. A significant decrease in blood glucose level and body weight was observed in db/db mice after 10 days of oral or abdominal administration, demonstrating their preventive and therapeutic effect for diabetes and obesity.

IT 496872-97-0P, [2-(Furan-2-yl)quinazolin-4-yl](3,4,5-trimethoxybenzyl)amine 553656-88-5P, [2-(Furan-2-yl)quinazolin-4-yl](4-methoxybenzyl)amine 896726-60-6P, [2-(Furan-2-yl)quinazolin-4-yl](2-methoxybenzyl)amine 896726-61-7P, [2-(Furan-2-yl)quinazolin-4-yl](3-methoxybenzyl)amine 896726-62-8P, [(Benzodioxol-5-yl)methyl][2-(furan-2-yl)quinazolin-4-yl]amine 896726-63-9P, (2,3-Dimethoxybenzyl)[2-(furan-2-yl)quinazolin-4-yl]amine 896726-64-0P, (3,5-Dimethoxybenzyl)[2-(furan-2-yl)quinazolin-4-yl]amine 896726-65-1P, (3,4-Dimethoxybenzyl)[2-(furan-2-yl)quinazolin-4-yl]amine 896726-66-2P, (2,4-Dimethoxybenzyl)[2-(furan-2-yl)quinazolin-4-yl]amine 896726-67-3P, (2,5-Dimethoxybenzyl)[2-(furan-2-yl)quinazolin-4-yl]amine 896726-68-4P, [2-(Furan-2-yl)quinazolin-4-yl](2,4,6-trimethoxybenzyl)amine
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(Uses)
(glucose lowering agent; preparation of quinazolines for treatment and prevention of diabetes and obesity)

RN 496872-97-0 ZCAPLUS
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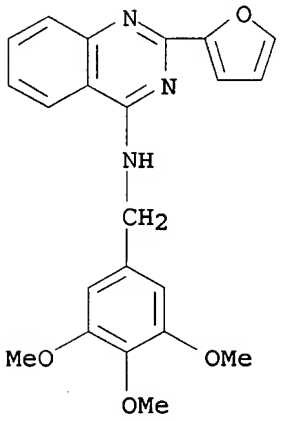

RN 553656-88-5 ZCAPLUS
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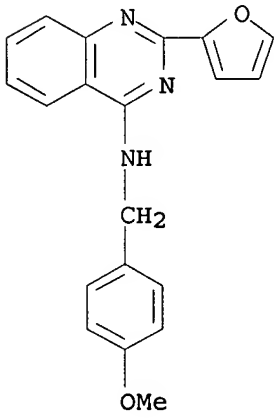

RN 896726-60-6 ZCAPLUS
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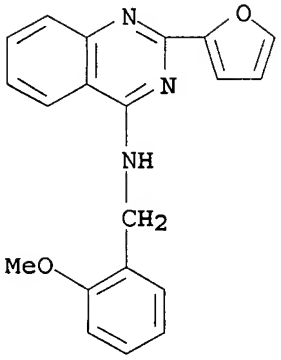

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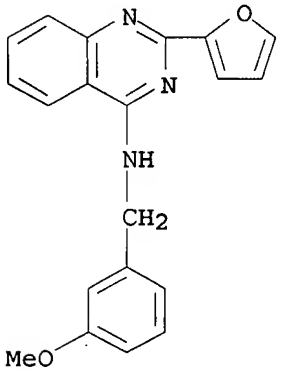

RN 896726-62-8 ZCAPLUS
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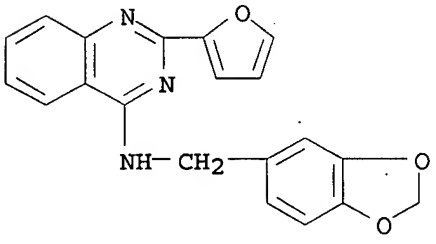

RN 896726-63-9 ZCAPLUS
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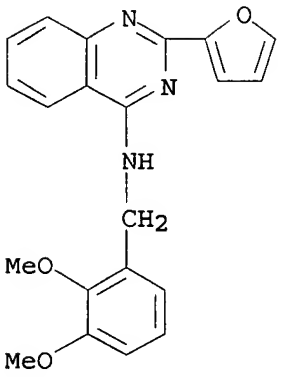

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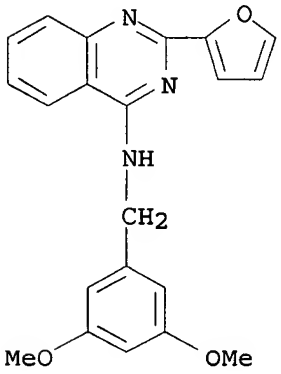

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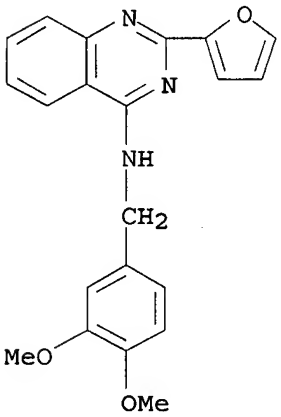

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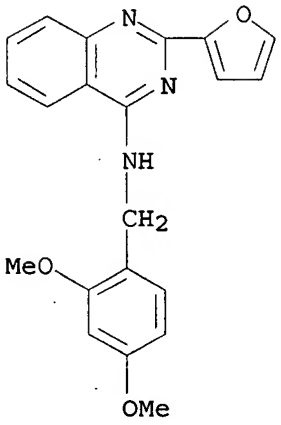

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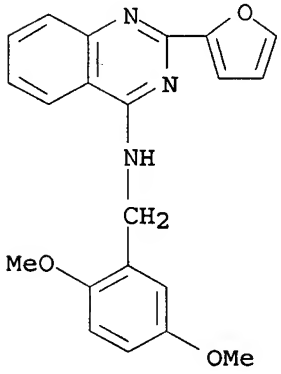

RN 896726-68-4 ZCAPLUS
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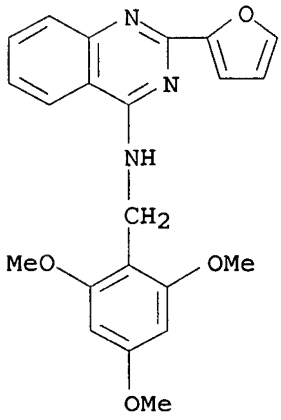


REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 40 ZCAPLUS COPYRIGHT 2007 ACS on STN

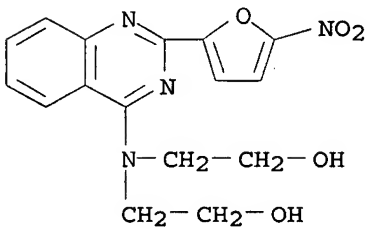
10/ 567,660

ACCESSION NUMBER: 2006:405003 ZCAPLUS
DOCUMENT NUMBER: 146:155278
TITLE: Non-stochastic and stochastic linear indices of the molecular pseudograph's atom-adjacency matrix: a novel approach for computational in silico screening and "rational" selection of new lead antibacterial agents
AUTHOR(S): Marrero-Ponce, Yovani; Marrero, Ricardo Medina; Torrens, Francisco; Martinez, Yamile; Bernal, Milagros Garcia; Zaldivar, Vicente Romero; Castro, Eduardo A.; Abalo, Ricardo Grau
CORPORATE SOURCE: Department of Pharmacy, Faculty of Chemical-Pharmacy, Central University of Las Villas, Santa Clara, 54830, Cuba
SOURCE: Journal of Molecular Modeling (2006), 12(3), 255-271
CODEN: JMMOFK; ISSN: 0948-5023
URL: http://www.springerlink.com/media/ef6tmfk36j3ttmb97w1h/contributions/1/2/v/4/l2v47qr26320v870.pdf
PUBLISHER: Springer GmbH
DOCUMENT TYPE: Journal; (online computer file)
LANGUAGE: English

AB A novel approach (TOMOCOMD-CARDD) to computer-aided rational drug design is illustrated. This approach is based on the calcn. of the non-stochastic and stochastic linear indexes of the mol. pseudograph's atom-adjacency matrix representing mol. structures. These TOMOCOMD-CARDD descriptors are introduced for the computational (virtual) screening and rational selection of new lead antibacterial agents using linear discrimination anal. The two structure-based antibacterial-activity classification models, including non-stochastic and stochastic indexes, classify correctly 91.61% and 90.75%, resp., of 1525 chems. in training sets. These models show high Matthews correlation coeffs. (MCC = 0.84 and 0.82). An external validation process was carried out to assess the robustness and predictive power of the model obtained. These QSAR models permit the correct classification of 91.49% and 89.31% of 505 compds. in an external test set, yielding MCCs of 0.84 and 0.79, resp. The TOMOCOMD-CARDD approach compares satisfactorily with respect to nine of the most useful models for antimicrobial selection reported to date. Finally, an in silico screening of 87 new chems. reported in the antiinfective field with antibacterial activities is developed showing the ability of the TOMOCOMD-CARDD models to identify new lead antibacterial compds.

IT 5055-20-9, Nifurquinazol
RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(novel QSAR model TOMOCOMD-CARDD in computer-aided rational drug design for selection of new lead antibacterial agents using linear discrimination anal.)

RN 5055-20-9 ZCAPLUS
CN Ethanol, 2,2'-[[2-(5-nitro-2-furanyl)-4-quinazolinyl]imino]bis- (9CI) (CA INDEX NAME)



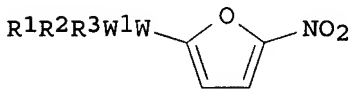
REFERENCE COUNT: 71 THERE ARE 71 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 40 ZCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:298831 ZCAPLUS
DOCUMENT NUMBER: 144:350707
TITLE: Preparation of nitrofurans as antibacterials.
INVENTOR(S): Chamberland, Suzanne; Malouin, Francois
PATENT ASSIGNEE(S): Ulysses Pharmaceutical Products Inc., Can.
SOURCE: PCT Int. Appl., 82 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

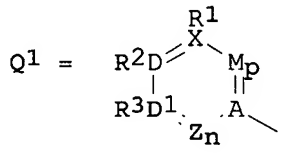
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006032138	A1	20060330	WO 2005-CA1436	20050922

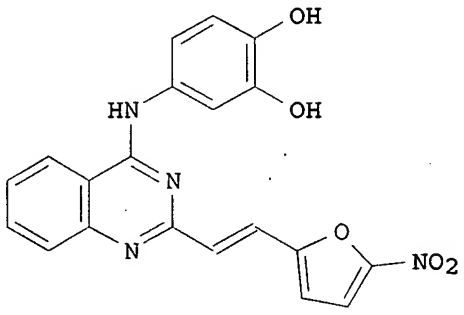
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.: US 2004-612148P P 20040923
OTHER SOURCE(S): MARPAT 144:350707
GI



I





II

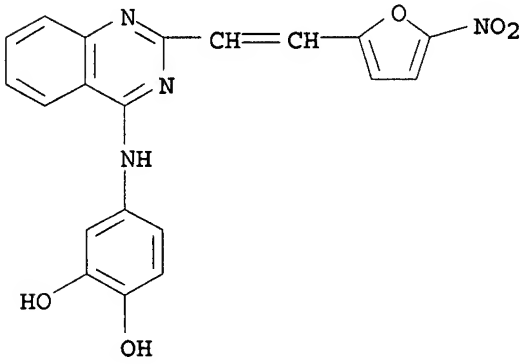
AB Title compds. (I; W = null, CH:CH, N:CH; W1 = null, or together with R1, R2, R3 = Q1; D, D1, X, M, A, Z = CH, C, O, S, NH, N; n, p = 0-2; R1-R3 = null, H, OH, halo, Me, alkyl, alkenyl, alkynyl, alkoxy, alkenyloxy, alkynyloxy, aryl, CF3, PhO, etc.; with provisos), were prepared Thus, title compound (II) (preparation outlined) showed a min. inhibitory concentration of 0.5

μg/mL against E. coli ATCC 25922.

IT 881169-49-9P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of nitrofurans as antibacterials)

RN 881169-49-9 ZCAPLUS

CN 1,2-Benzenediol, 4-[[2-[2-(5-nitro-2-furanyl)ethenyl]-4-quinazolinyl]amino]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 40 ZCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:100738 ZCAPLUS

DOCUMENT NUMBER: 144:198849

TITLE: Novel dosage form comprising modified-release and immediate-release active ingredients

INVENTOR(S): Vaya, Navin; Karan, Rajesh Singh; Sadanand, Sunil; Gupta, Vinod Kumar

PATENT ASSIGNEE(S): India

SOURCE: U.S. Pat. Appl. Publ., 49 pp., Cont.-in-part of U.S. Ser. No. 630,446.
CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2006024365	A1	20060202	US 2005-134633	20050519
IN 2002MU00697	A	20040529	IN 2002-MU697	20020805
IN 193042	A1	20040626		
IN 2002MU00699	A	20040529	IN 2002-MU699	20020805
IN 2003MU00080	A	20050204	IN 2003-MU80	20030122
IN 2003MU00082	A	20050204	IN 2003-MU82	20030122
US 2004096499	A1	20040520	US 2003-630446	20030729

PRIORITY APPLN. INFO.:

IN 2002-MU697	A	20020805
IN 2002-MU699	A	20020805
IN 2003-MU80	A	20030122
IN 2003-MU82	A	20030122
US 2003-630446	A2	20030729

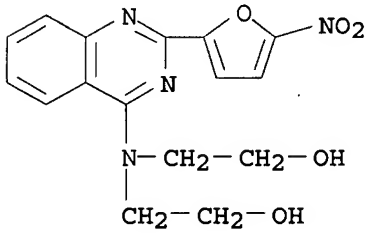
AB A dosage form comprising of a high dose, high solubility active ingredient as modified release and a low dose active ingredient as immediate release where the weight ratio of immediate release active ingredient and modified release active ingredient is from 1:10 to 1:15000 and the weight of modified

release active ingredient per unit is from 500 mg to 1500 mg; a process for preparing the dosage form. Tablets containing 10 mg sodium pravastatin and 1000 mg niacin were prepared The release of sodium pravastatin after 24 h was 67.7%, and the release of niacin after 1 h was 84.1%.

IT 5055-20-9, Nifurquinazol
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(novel dosage form comprising modified-release and immediate-release active ingredients)

RN 5055-20-9 ZCAPLUS

CN Ethanol, 2,2'-[[2-(5-nitro-2-furanyl)-4-quinazolinyl]imino]bis- (9CI) (CA INDEX NAME)



L4 ANSWER 5 OF 40 ZCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2005:686350 ZCAPLUS

DOCUMENT NUMBER: 144:124809

TITLE: Identification of antimicrobial compounds active against intracellular Staphylococcus aureus

AUTHOR(S): Malouin, Francois; Brouillette, Eric; Martinez, Alejandro; Boyll, Bobbi J.; Toth, James L.; Gage, Jennifer L.; Allen, Norris E.

CORPORATE SOURCE: Faculte des Sciences, Centre d'Etude et de Valorisation de la Diversite Microbienne (CEVDM), Departement de Biologie, Universite de Sherbrooke, Sherbrooke, QC, J1K 2R1, Can.

SOURCE: FEMS Immunology and Medical Microbiology (2005), 45(2), 245-252
CODEN: FIMIEV; ISSN: 0928-8244

PUBLISHER: Elsevier B.V.

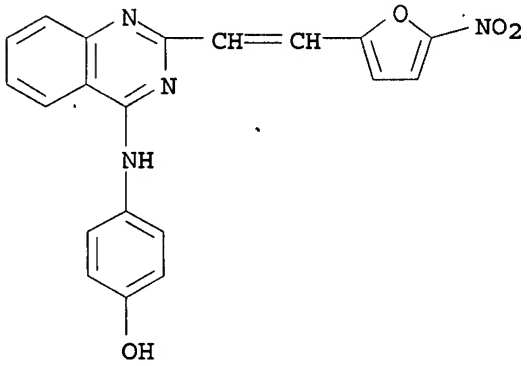
DOCUMENT TYPE: Journal

LANGUAGE: English

AB Small-colony variants (SCVs) of Staphylococcus aureus exhibit characteristics of bacteria that can penetrate mammalian cells and remain intracellular and innocuous for indefinite periods. These properties make SCVs a convenient tool that can be used to identify new antibacterial agents having activity against intracellular, quiescent bacteria. Agents active against SCVs could be useful in the treatment of chronic staphylococcal infections such as bovine mastitis. An hemB deletion mutant of S. aureus Newbould, a bovine mastitis isolate, having a stable, genetically defined SCV phenotype, was used in a screening program to identify compds. active against intracellular, gram-pos. bacteria. Out of more than 260,000 compds. screened, 9 compds. having the desired properties were identified. The range of MICs against gram-pos. bacteria was ≤0.12-32 μg ml-1. One of the compds. (number 8) showed excellent activity against gram-pos. (MICs ≤0.12 μg ml-1) and gram-neg. (MICs ≤0.12-4 μg ml-1) bacteria. Each of the nine compds. demonstrated efficacy in a neutropenic mouse thigh infection model. Two compds., including compound number 8, reduced nos. of bacteria in a mouse mastitis model of infection. Application of a stepwise screening process has identified lead compds. that may be useful for treating persistent, intracellular infections.

IT 60452-41-7

RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(antimicrobial screening against intracellular Staphylococcus aureus)
RN 60452-41-7 ZCAPLUS
CN Phenol, 4-[[2-[2-(5-nitro-2-furanyl)ethenyl]-4-quinazolinyl]amino]- (9CI) (CA INDEX NAME)

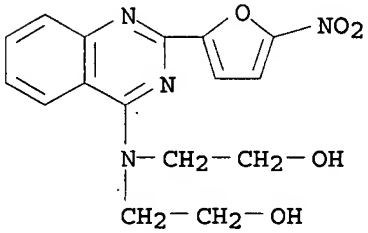


REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 6 OF 40 ZCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:244333 ZCAPLUS
DOCUMENT NUMBER: 143:307
TITLE: Atom, atom-type, and total nonstochastic and stochastic quadratic fingerprints: a promising approach for modeling of antibacterial activity
AUTHOR(S): Marrero-Ponce, Yovani; Medina-Marrero, Ricardo; Torrens, Francisco; Martinez, Yamile; Romero-Zaldivar, Vicente; Castro, Eduardo A.
CORPORATE SOURCE: Department of Pharmacy, Faculty of Chemical-Pharmacy, Central University of Las Villas, Santa Clara, 54830, Cuba
SOURCE: Bioorganic & Medicinal Chemistry (2005), 13(8), 2881-2899
CODEN: BMECEP; ISSN: 0968-0896
PUBLISHER: Elsevier Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The Topol. Mol. Computer Design (TOMOCOMD-CARDD) approach has been introduced for the classification and design of antimicrobial agents using computer-aided mol. design. For this propose, atom, atom-type, and total quadratic indexes have been generalized to codify chemical structure information. In this sense, stochastic quadratic indexes have been introduced for the description of the mol. structure. These stochastic fingerprints are based on a simple model for the intramol. movement of all valence-bond electrons. In this work, a complete data set containing 1006 antimicrobial agents is collected and presented. Two structure-based antibacterial activity classification models have been generated. The models (including nonstochastic and stochastic indexes) classify correctly more than 90% of 1525 compds. in training sets. These models permit the correct classification of 92.28% and 89.31% of 505 compds. in an external test sets. The approach, also, satisfactorily compares with respect to nine of the most useful models for antimicrobial selection reported to date. Finally, a virtual screening of 87 new compds. reported in the anti-infective field with antibacterial activities is developed showing the ability of the models to identify new leads as antibacterial.
IT 5055-20-9, Nifurquinazol

10/ 567,660

RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(atom, atom-type, and total nonstochastic and stochastic quadratic fingerprints as promising approach for modeling antibacterial activity)
RN 5055-20-9 ZCAPLUS
CN Ethanol, 2,2'-[[2-(5-nitro-2-furanyl)-4-quinazolinyl]imino]bis- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 91 THERE ARE 91 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

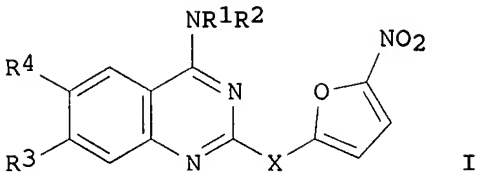
L4 ANSWER 7 OF 40 ZCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:141062 ZCAPLUS
DOCUMENT NUMBER: 142:240454
TITLE: Preparation of halogenated quinazolinyl nitrofurans as antibacterial agents
INVENTOR(S): Chamberland, Suzanne; Malouin, Francois
PATENT ASSIGNEE(S): Ulysses Pharmaceutical Products Inc., Can.
SOURCE: PCT Int. Appl., 59 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 2005014585	A1	20050217	WO 2004-CA1466		20040806
WO 2005014585	A8	20050909			
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW					
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG					
AU 2004262533	A1	20050217	AU 2004-262533		20040806
CA 2534405	A1	20050217	CA 2004-2534405		20040806
EP 1660486	A1	20060531	EP 2004-761630		20040806
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK					
CN 1832941	A	20060913	CN 2004-80022816		20040806
BR 2004013372	A	20061017	BR 2004-13372		20040806
JP 2007501809	T	20070201	JP 2006-522859		20040806
US 2006258693	A1	20061116	US 2006-567660		20060208
PRIORITY APPLN. INFO.:			US 2003-493336P	P	20030808
			WO 2004-CA1466	W	20040806

OTHER SOURCE(S): CASREACT 142:240454; MARPAT 142:240454

PG Pub

GI

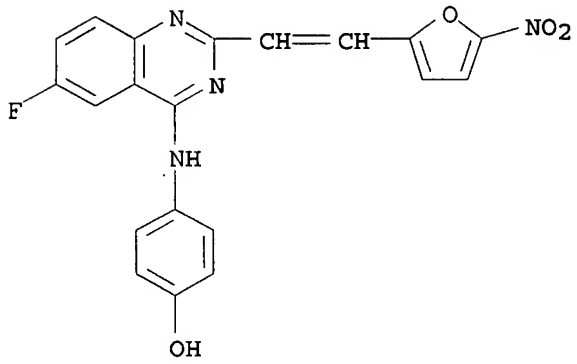


I

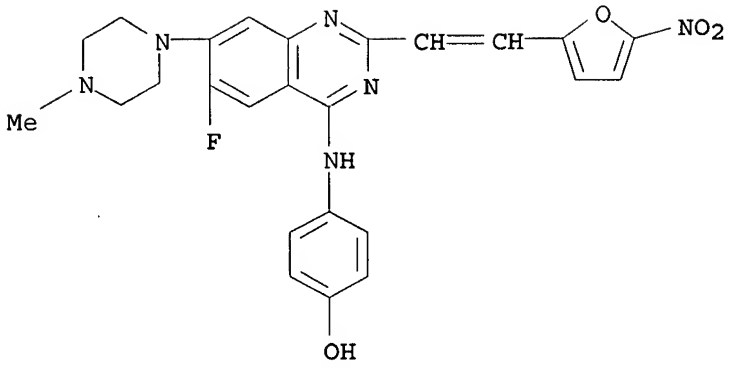
AB Title compds. [I; X = null, trans- or cis CH:CH; R1 = (hydroxy-substituted) alkyl, alkenyl, alkynyl, aryl; R2 = H, alkyl, aryl; R3, R4 = H, halo, solubilizing group; ≥1 of R3, R4 = halo], were prepared Thus, p-aminophenol and 6-fluoro-2-[2-(5-nitro-2-furyl)vinyl]-4-chloroquinazoline (preparation given) were heated together in DMF for 2 h at 70-90° to give 6-fluoro-2-[2-(5-nitro-2-furyl)vinyl]-4-(p-hydroxyanilino)quinazoline. The latter showed a min. inhibitory concentration of
0.03-0.06 μg/mL against. S. aureus ATCC 29213.

IT 844692-03-1P 844692-04-2P
RL: BSU (Biological study, unclassified); BUU (Biological use, unclassified); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(claimed compound; preparation of halogenated quinazolinyl nitrofurans as antibacterial agents)

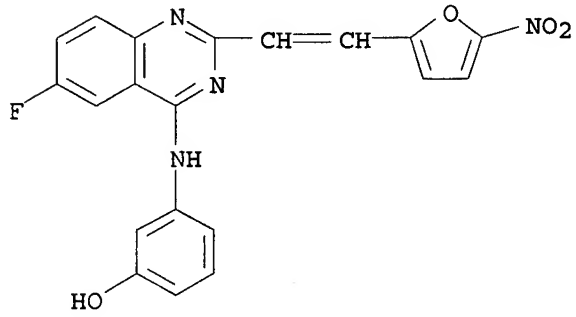
RN 844692-03-1 ZCAPLUS
CN Phenol, 4-[[6-fluoro-2-[2-(5-nitro-2-furanyl)ethenyl]-4-quinazolinyl]amino]- (9CI) (CA INDEX NAME)



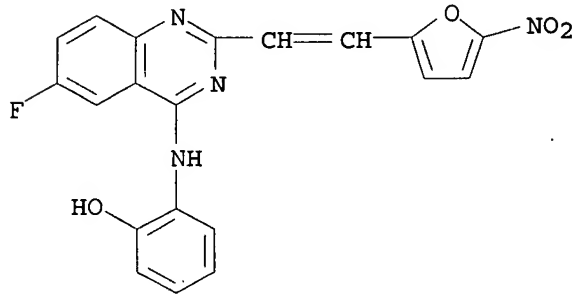
RN 844692-04-2 ZCAPLUS
CN Phenol, 4-[[6-fluoro-7-(4-methyl-1-piperazinyl)-2-[2-(5-nitro-2-furanyl)ethenyl]-4-quinazolinyl]amino]- (9CI) (CA INDEX NAME)



IT 844692-09-7P 844692-10-0P
RL: BSU (Biological study, unclassified); BUU (Biological use, unclassified); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of halogenated quinazolinyl nitrofurans as antibacterial agents)
RN 844692-09-7 ZCAPLUS
CN Phenol, 3-[[6-fluoro-2-[2-(5-nitro-2-furanyl)ethenyl]-4-quinazolinyl]amino]- (9CI) (CA INDEX NAME)



RN 844692-10-0 ZCAPLUS
CN Phenol, 2-[[6-fluoro-2-[2-(5-nitro-2-furanyl)ethenyl]-4-quinazolinyl]amino]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 8 OF 40 ZCAPLUS COPYRIGHT 2007 ACS on STN

10/ 567,660

ACCESSION NUMBER: 2004:550533 ZCAPLUS
DOCUMENT NUMBER: 141:82297
TITLE: Immunostimulatory nucleic acids for the treatment of disorders associated with microorganisms, for preventing antibiotic resistance and for treating and preventing warts
INVENTOR(S): Bratzler, Robert L.; Petersen, Deanna M.
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 54 pp., Cont. of U.S. Ser. No. 801,839, abandoned.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

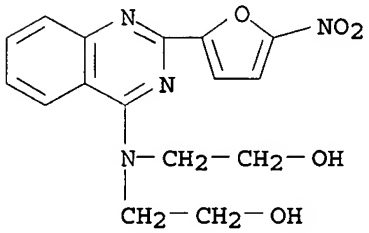
PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 2004131628	A1	20040708	US 2003-666733		20030919
PRIORITY APPLN. INFO.:			US 2000-187834P	P	20000308
			US 2001-801839	B1	20010308

OTHER SOURCE(S): MARPAT 141:82297

AB The invention involves administration of an immunostimulatory nucleic acid alone or in combination with an antimicrobial agent for the treatment or prevention of infectious disease associated with microorganisms in subjects, for preventing antibiotic resistance and for treating and preventing warts. The combination of drugs are administered in synergistic amts. or in various dosages or at various time schedules. The invention also relates to kits and compns. concerning the combination of drugs.

IT 5055-20-9, Nifurquinazol
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(immunostimulatory nucleic acids for treatment of disorders associated with microorganisms, preventing antibiotic resistance, and treating and preventing warts, and use with other agents)

RN 5055-20-9 ZCAPLUS
CN Ethanol, 2,2'-[[2-(5-nitro-2-furanyl)-4-quinazolinyl]imino]bis- (9CI) (CA INDEX NAME)



L4 ANSWER 9 OF 40 ZCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:310971 ZCAPLUS
DOCUMENT NUMBER: 140:321378
TITLE: Preparation of aminoquinazoline protein kinase B inhibitors as anticancer agents
INVENTOR(S): Barnickel, Gerhard; Eggenweiler, Hans-Michael; Eiermann, Volker; Gericke, Rolf; Rautenberg, Wilfried; Sirrenberg, Christian; Scharm, Burkhard
PATENT ASSIGNEE(S): Merck Patent G.m.b.H., Germany
SOURCE: PCT Int. Appl., 96 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent

10/ 567,660

LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

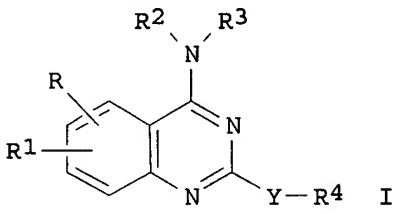
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004030671	A2	20040415	WO 2003-EP9391	20030825
WO 2004030671	A3	20040610		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

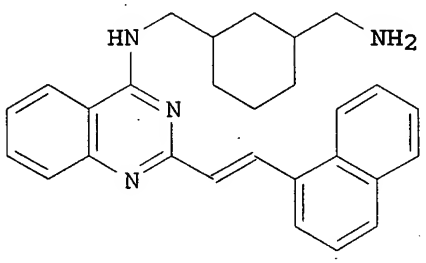
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

AU 2003258662	A1	20040423	AU 2003-258662		20030825
PRIORITY APPLN. INFO.:			EP 2002-22152	A	20021002
			WO 2003-EP9391	W	20030825

OTHER SOURCE(S): CASREACT 140:321378; MARPAT 140:321378
GI



I



II

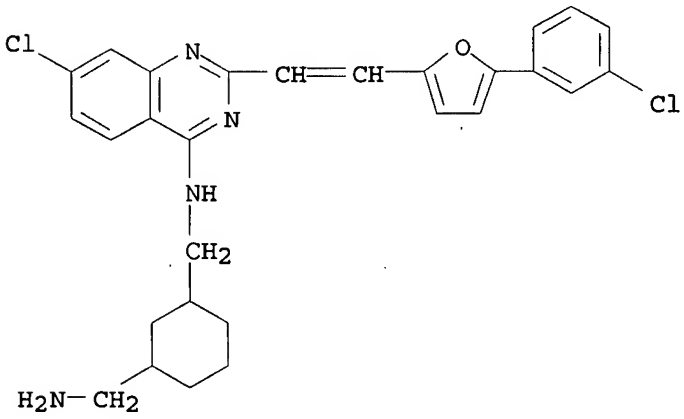
AB Title compds. I [wherein R and R1 = independently H, alkyl, OH, alkoxy, halo, N(R5)2, NO2, CN, CHO, alkanoyl, CON(R5)2, CO2R5, allyl, CH=CHCO2R5, CH=CHCON(R5)2, alkylsulfonyl, or (un)substituted Ph; R2 and R3 = independently H, (cyclo)alkyl, (un)substituted heterocyclyl(alkyl), alkoxy(alkyl), amino(alkyl), aryl(alkyl), etc.; or NR2R3 = (un)substituted heterocyclyl; R4 = (un)substituted Ph, naphthyl, biphenyl, or heterocyclyl; R5 = H or alkyl; Y = a direct bond, (CH2)n, or NR5(CH2)m; m = 0-6; n = 1-6; and pharmaceutically tolerable salts and solvates thereof] were prepared via solution and solid-phase methods as protein kinase B (PKB or Akt or RAC) inhibitors (no data). For example, cyclization of anthranilic acid with acetic anhydride gave the benzoxazinone, which was treated with ammonium acetate in DMF to afford 2-methylquinazolin-4-one (no data). Condensation with naphthalene-1-carbaldehyde in AcOH to provide the vinyl derivative, followed by chlorination and coupling with [(3-aminomethylcyclohexyl)methyl]amine, gave II. Also claimed is the use of I and their pharmaceutical compns. for the treatment of hyperproliferative disorders, such as cancer, psoriasis, arthritis, inflammation, endometriosis, scarring, or benign prostatic hyperplasia (no data).

IT 406207-06-5P, [(3-Aminomethylcyclohexyl)methyl][7-chloro-2-[2-[5-(3-chlorophenyl)furan-2-yl]vinyl]quinazolin-4-yl]amine
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(PKB inhibitor; preparation of aminoquinazoline PKB inhibitors as anticancer agents)

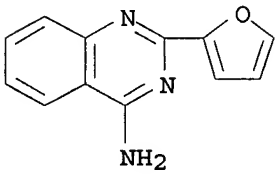
RN 406207-06-5 ZCAPLUS

10/ 567,660

CN 1,3-Cyclohexanedimethanamine, N-[7-chloro-2-[2-[5-(3-chlorophenyl)-2-furanyl]ethenyl]-4-quinazolinyl]- (9CI) (CA INDEX NAME)



L4 ANSWER 10 OF 40 ZCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:205966 ZCAPLUS
DOCUMENT NUMBER: 142:197901
TITLE: Product class 13: quinazolines
AUTHOR(S): Kikelj, D.
CORPORATE SOURCE: Germany
SOURCE: Science of Synthesis (2004), 16, 573-749
CODEN: SSCYJ9
PUBLISHER: Georg Thieme Verlag
DOCUMENT TYPE: Journal; General Review
LANGUAGE: English
AB A review. Preparation of quinazolines by ring closure and ring transformation reactions as well as aromatization and substituent modification is given.
IT 40172-85-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of quinazolines)
RN 40172-85-8 ZCAPLUS
CN 4-Quinazolinamine, 2-(2-furanyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 1014 THERE ARE 1014 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 11 OF 40 ZCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:146768 ZCAPLUS
DOCUMENT NUMBER: 140:350028
TITLE: Designing Antibacterial Compounds through a Topological Substructural Approach
AUTHOR(S): Molina, Enrique; Gonzales Diaz, Humberto; Gonzalez, Maykel Perez; Rodriguez, Elismary; Uriarte, Eugenio
CORPORATE SOURCE: Department of Chemistry and Pharmacy Faculty of Engineering Chemistry and Pharmacy, University of

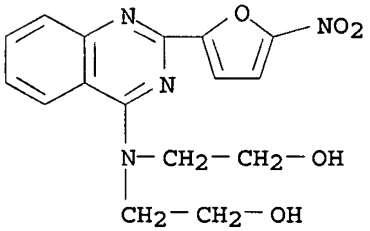
Camagueey, Camagueey, 74650, Cuba
SOURCE: Journal of Chemical Information and Computer Sciences (2004), 44(2), 515-521
CODEN: JCISD8; ISSN: 0095-2338
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A novel application of TOPol. Substructural Mol. DEsign (TOPS-MODE) was carried out in antibacterial drugs using computer-aided mol. design. Two series of compds., one containing antibacterial and the other containing non-antibacterial compds., were processed by a k-means cluster anal. in order to design training and predicting series. All clusters had a p-level < 0.005. Afterward, a linear classification function has been derived toward discrimination between antibacterial and non-antibacterial compds. The model correctly classifies 94% of active and 86% of inactive compds. in the training series. More specifically, the model showed a global good classification of 91%, i.e., 263 cases out of 289. In predicting series, the model has shown overall predictabilities of 91 and 83% for active and inactive compds., resp. Thereby, the model has a global percentage of good classification of 89%. The TOPS-MODE approach, also, similarly compares with respect to one of the most useful models for antimicrobials selection reported to date.

IT 5055-20-9, Nifurquinazol
RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(designing antibacterial compds. through a topol. substructural approach)

RN 5055-20-9 ZCAPLUS

CN Ethanol, 2,2'-[[2-(5-nitro-2-furanyl)-4-quinazolinyl]imino]bis- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 65 THERE ARE 65 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 12 OF 40 ZCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:41226 ZCAPLUS
DOCUMENT NUMBER: 140:105321
TITLE: Methods and compositions relating to isoleucine boroproline compounds
INVENTOR(S): Adams, Sharlene; Miller, Glenn T.; Jesson, Michael I.; Jones, Barry
PATENT ASSIGNEE(S): Point Therapeutics, Inc., USA
SOURCE: PCT Int. Appl., 152 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004004658	A2	20040115	WO 2003-US21405	20030709

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     WO 2004004658          A3      20050804
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,
             PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN,
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         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
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             FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     CA 2491466             A1      20040115    CA 2003-2491466        20030709
     AU 2003265264          A1      20040123    AU 2003-265264         20030709
     US 2004077601          A1      20040422    US 2003-616694         20030709
     US 2005084490          A1      20050421    US 2003-616409         20030709
     EP 1578434             A2      20050928    EP 2003-763380         20030709
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             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
     JP 2006507352          T       20060302    JP 2004-562634         20030709
     CN 1802090             A       20060712    CN 2003-821282         20030709
     CN 1826129             A       20060830    CN 2003-821281         20030709
     IN 2005KN00151         A       20050916    IN 2005-KN151          20050208
PRIORITY APPLN. INFO.:                          US 2002-394856P     P  20020709
                                                US 2002-414978P     P  20021001
                                                US 2003-466435P     P  20030428
                                                WO 2003-US21405     W  20030709
OTHER SOURCE(S):            MARPAT 140:105321
```
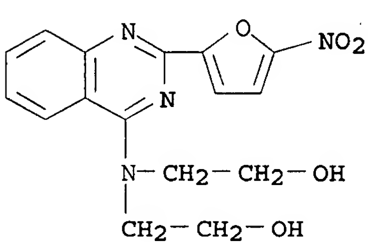

AB A method for treating subjects with, inter alia, abnormal cell proliferation or infectious disease using agents of formula (I, AmNHCH(CH(CH3)CH2CH3)COA1R) (where Am and A1 are amino acids and R = organo boronates, organo phosphonates, fluoroalkyl ketones, alphaketos, N-peptiolyl-O-(acylhydroxylamines), azapeptides, azetidines, fluoroolefins dipeptide isosteres, peptidyl (α-aminoalkyl) phosphonate esters, aminoacyl pyrrolidine-2-nitriles and 4-cyanothiazolidides) is claimed. Methods for stimulating an immune response using the compds. of the invention are also claimed. Compns. containing Ile-boroPro compds. are also provided as are kits containing the compns. The invention embraces the use of these compds. alone or in combination with other therapeutic agents.

IT 5055-20-9, Nifurquinazol
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(therapeutic methods and compns. relating to isoleucine boroproline compds. alone or in combination with other drugs, antibodies, or antigens)

RN 5055-20-9 ZCAPLUS

CN Ethanol, 2,2'-[[2-(5-nitro-2-furanyl)-4-quinazolinyl]imino]bis- (9CI) (CA INDEX NAME)



L4 ANSWER 13 OF 40 ZCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:754381 ZCAPLUS
DOCUMENT NUMBER: 137:279208

10/ 567,660

TITLE: Preparation of (indazol-5-ylamino)quinazolines as Rho-kinase inhibitors

INVENTOR(S): Nagarathnam, Dhanapalan; Asgari, Davoud; Shao, Jianxing; Liu, Xiao-Gao; Khire, Uday; Wang, Chunguang; Hart, Barry; Boyer, Stephen; Weber, Olaf; Lynch, Mark; Bankston, Donald

PATENT ASSIGNEE(S): Bayer Corporation, USA

SOURCE: PCT Int. Appl., 74 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002076976	A2	20021003	WO 2002-US8659	20020322
WO 2002076976	A3	20021212		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
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CA 2441492	A1	20021003	CA 2002-2441492	20020322
AU 2002250394	A1	20021008	AU 2002-250394	20020322
US 2003125344	A1	20030703	US 2002-103566	20020322
EP 1370553	A2	20031217	EP 2002-719303	20020322
EP 1370553	B1	20060510		
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JP 2004524350	T	20040812	JP 2002-576234	20020322
AT 325795	T	20060615	AT 2002-719303	20020322
TW 261055	B	20060901	TW 2002-91105591	20020322
PT 1370553	T	20060929	PT 2002-719303	20020322
ES 2264477	T3	20070101	ES 2002-2719303	20020322
US 2003220357	A1	20031127	US 2002-252369	20020924
CA 2507381	A1	20040408	CA 2003-2507381	20030924
WO 2004029045	A2	20040408	WO 2003-US29538	20030924
WO 2004029045	A3	20040722		
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AU 2003270785	A1	20040419	AU 2003-270785	20030924
EP 1542992	A2	20050622	EP 2003-752497	20030924
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JP 2006508068	T	20060309	JP 2004-540124	20030924
HK 1061030	A1	20060908	HK 2004-104115	20040609
US 2006142313	A1	20060629	US 2006-354977	20060216
US 2006142314	A1	20060629	US 2006-354978	20060216
PRIORITY APPLN. INFO.:			US 2001-277974P P	20010323
			US 2001-315341P P	20010829

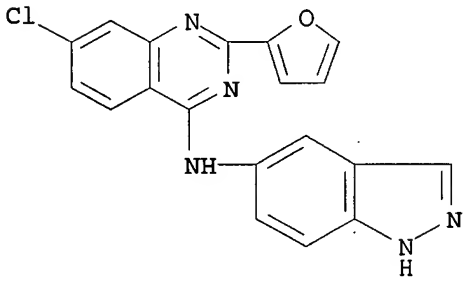
US 2001-315338P P 20010829
US 2002-103565 B1 20020322
US 2002-103566 B1 20020322
WO 2002-US8659 W 20020322
US 2002-252369 A 20020924
WO 2003-US29538 W 20030924
OTHER SOURCE(S): CASREACT 137:279208; MARPAT 137:279208
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Title compds. I [Y = N, CR17; X = alkyl, alkoxy, thioalkoxy, amido, etc.; p = 0-3; a, c = CR5, NR6, etc.; b = CR5, N; A = H, halo, carboxy, cyano, alkoxy, etc.; B = (un)substituted up to 3 times in any position by R5; R1,6 = H, alkyl; R2-5 = H, alkyl, alkenyl; R17 = H, alkyl, CN with provisions] were prepared For instance, 2,4-Dichloroquinazoline (preparation given) was reacted with 5-aminoindazole (THF/H2O, KOAc) to give 2-(N-(1H-indazol-5-yl)amino)-4-chloroquinazoline in 92% yield. This was coupled to 2,4-dichlorophenylboronic acid (ethylene glycol di-Me ether, Pd(dppf)Cl2, NaHCO3, reflux) to give II. I are rho-kinase inhibitors and are useful for inhibiting tumor growth, treating erectile dysfunction and coronary heart disease.

IT 461037-95-6P 461037-96-7P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(rho-kinase inhibitor; preparation of (indazol-5-ylamino)quinazolines as Rho-kinase inhibitors)

RN 461037-95-6 ZCAPLUS
CN 4-Quinazolinamine, 7-chloro-2-(2-furanyl)-N-1H-indazol-5-yl- (9CI) (CA INDEX NAME)



RN 461037-96-7 ZCAPLUS
CN 4-Quinazolinamine, 7-chloro-2-(2-furanyl)-N-1H-indazol-5-yl-, bis(trifluoroacetate) (9CI) (CA INDEX NAME)

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CRN 461037-95-6
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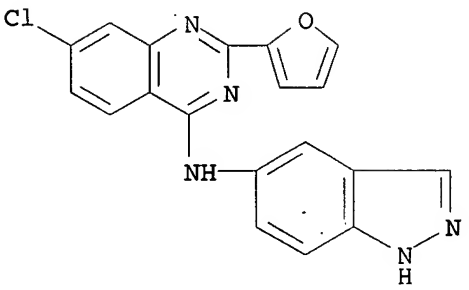
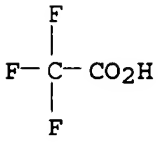


CM 2

CRN 76-05-1
CMF C2 H F3 O2

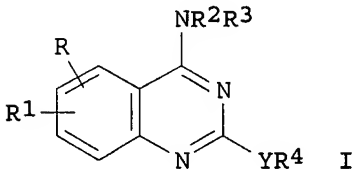


L4 ANSWER 14 OF 40 ZCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:240745 ZCAPLUS
DOCUMENT NUMBER: 136:279467
TITLE: Preparation of quinazolin-4-ylamines as glycoprotein IbIX antagonists.
INVENTOR(S): Mederski, Werner; Devant, Ralf; Barnickel, Gerhard; Bernotat-Danielowski, Sabine; Vickers, James; Cezanne, Bertram; Dhanoa, Daljit; Zhao, Bao-Ping; Rinker, James; Player, Mark R.; Jaeger, Edward; Soll, Richard
PATENT ASSIGNEE(S): Merck Patent G.m.b.H., Germany
SOURCE: PCT Int. Appl., 90 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002024666	A2	20020328	WO 2001-EP10704	20010917
WO 2002024666	A3	20020926		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2422560	A1	20020328	CA 2001-2422560	20010917
AU 2002013923	A5	20020402	AU 2002-13923	20010917
EP 1318985	A2	20030618	EP 2001-982300	20010917
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				

BR 2001014021	A	20030819	BR 2001-14021		20010917
HU 200302429	A2	20031028	HU 2003-2429		20010917
JP 2004509875	T	20040402	JP 2002-529076		20010917
NO 2003001267	A	20030519	NO 2003-1267		20030319
US 2004044204	A1	20040304	US 2003-380909		20030320
ZA 2003003069	A	20040719	ZA 2003-3069		20030417
PRIORITY APPLN. INFO.:			US 2000-666117	A	20000920
			WO 2001-EP10704	W	20010917

OTHER SOURCE(S): MARPAT 136:279467
GI



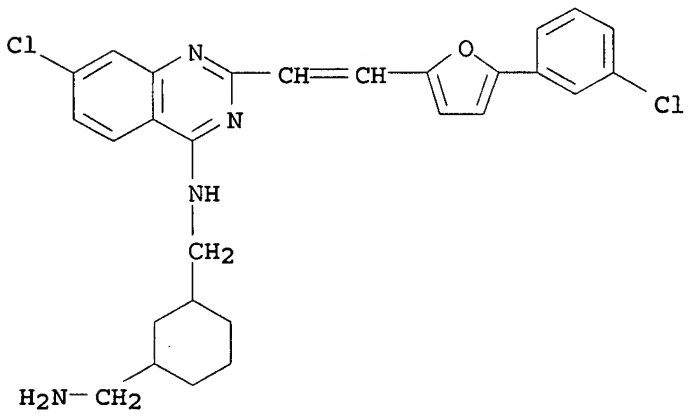
I

AB Title compds. [I; R, R1 = H, alkyl, halo, amino, NO2, cyano, allyl, (substituted) Ph, etc.; R2, R3 = H, alkyl, cycloalkyl, (substituted) heterocyclyl, hydroxyalkyl, etc.; NR2R3 = (substituted) heterocyclyl; R4 = (substituted) aryl, heterocyclyl; Y = (CH:CH)n; n = 1, 2; with provisos], were prepared for treatment of thrombotic disorders (no data). Thus, 4-chloro-2-(2-naphthalen-1-ylvinyl)quinazoline and 1,3-bis(aminomethyl)cyclohexane were heated in EtOH at 80° for 3 h to give 4-[N-(3-aminomethylcyclohexylmethyl)amino]-2-(2-naphthalen-1-ylvinyl)quinazoline.

IT 406207-06-5P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of quinazolin-4-ylamines as glycoprotein IbIX antagonists)

RN 406207-06-5 ZCAPLUS

CN 1,3-Cyclohexanedimethanamine, N-[7-chloro-2-[2-[5-(3-chlorophenyl)-2-furanyl]ethenyl]-4-quinazolinyl]- (9CI) (CA INDEX NAME)



L4 ANSWER 15 OF 40 ZCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2000:304988 ZCAPLUS
DOCUMENT NUMBER: 133:89495

10/ 567,660

TITLE: Isoquinoline and Quinazoline Urea Analogues as Antagonists for the Human Adenosine A3 Receptor

AUTHOR(S): Van Muijlwijk-Koezen, Jacqueline E.; Timmerman, Henk; Van der Goot, Henk; Menge, Wiro M. P. B.; Von Kuenzel, Jacobien Frijtag; De Groote, Miriam; IJzerman, Adriaan P.

CORPORATE SOURCE: Leiden/Amsterdam Center for Drug Research Division of Medicinal Chemistry Department of Pharmacochemistry, Vrije Universiteit, Amsterdam, 1081 HV, Neth.

SOURCE: Journal of Medicinal Chemistry (2000), 43(11), 2227-2238
CODEN: JMCMAR; ISSN: 0022-2623

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

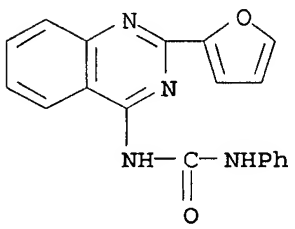
LANGUAGE: English

AB Isoquinoline and quinazoline urea derivs. were found to bind to human adenosine A3 receptors. Series of N-phenyl-N'-quinazolin-4-ylurea derivs. and N-phenyl-N'-isoquinolin-1-ylurea derivs. were synthesized and tested in radioligand binding assays on their adenosine receptor affinities. A structure-affinity anal. indicated that on the 2-position of the quinazoline ring or the equivalent 3-position of the isoquinoline ring a Ph or heteroaryl substituent increased the adenosine A3 receptor affinity in comparison to unsubstituted or aliphatic derivs. Furthermore, the structure-affinity relationship of substituted phenylurea analogs was investigated. Substituents such as electron-withdrawing or electron-donating groups were introduced at different positions of the benzene ring to probe electronic and positional effects of substitution. Substitution on the 3- or 4-position of the Ph ring decreased the adenosine A3 receptor affinity. Substitution at position 2 with an electron-donating substituent, such as Me or methoxy, increased human adenosine A3 receptor affinity, whereas substitution on the 2-position with an electron-withdrawing substituent did not influence affinity. Combination of the optimal substituents in the two series had an additive effect, which led to the potent human adenosine A3 receptor antagonist N-(2-methoxyphenyl)-N'-(2-(3-pyridyl)quinazolin-4-yl)urea (VUF5574, I) showing a Ki value of 4 nM and being at least 2500-fold selective vs. A1 and A2A receptors. Compound I competitively antagonized the effect of an agonist in a functional A3 receptor assay, i.e., inhibition of cAMP production in cells expressing the human adenosine A3 receptor; a pA2 value of 8.1 was derived from a Schild plot. In conclusion, compound I is a potent and selective human adenosine A3 receptor antagonist and might be a useful tool in further characterization of the human A3 receptor.

IT 280139-00-6P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation of isoquinoline and quinazoline urea analogs as antagonists for human adenosine A3 receptor)

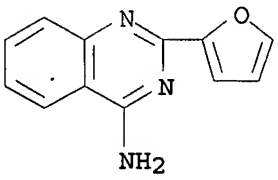
RN 280139-00-6 ZCAPLUS

CN Urea, N-[2-(2-furanyl)-4-quinazolinyl]-N'-phenyl- (9CI) (CA INDEX NAME)



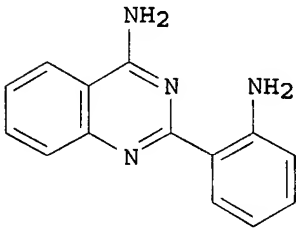
IT 40172-85-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of isoquinoline and quinazoline urea analogs as antagonists for human adenosine A3 receptor)
RN 40172-85-8 ZCAPLUS
CN 4-Quinazolinamine, 2-(2-furanyl)- (9CI) (CA INDEX NAME)



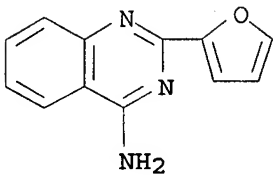
REFERENCE COUNT: 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 16 OF 40 ZCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2000:248619 ZCAPLUS
DOCUMENT NUMBER: 133:30698
TITLE: Microwave-enhanced synthesis of 4-aminoquinazolines
AUTHOR(S): Seijas, Julio A.; Vazquez-Tato, M. Pilar; Martinez, M. Montserrat
CORPORATE SOURCE: Departamento de Quimica Organica, Facultad de Ciencias, Universidad de Santiago de Compostela, Lugo, 27080, Spain
SOURCE: Tetrahedron Letters (2000), 41(13), 2215-2217
CODEN: TELEAY; ISSN: 0040-4039
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 133:30698
GI



I

AB Aromatic nitriles react with anthranilonitrile in a domestic microwave oven to afford good yields of the corresponding 4-aminoquinazolines, e.g. I, in a very short irradiation time.
IT 40172-85-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(microwave enhanced preparation of aminoquinazolines)
RN 40172-85-8 ZCAPLUS
CN 4-Quinazolinamine, 2-(2-furanyl)- (9CI) (CA INDEX NAME)

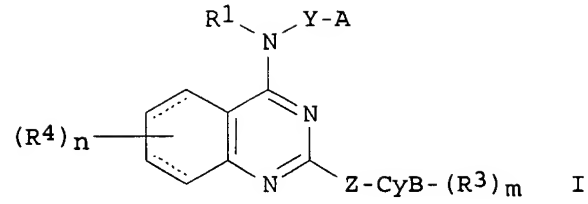


REFERENCE COUNT: 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

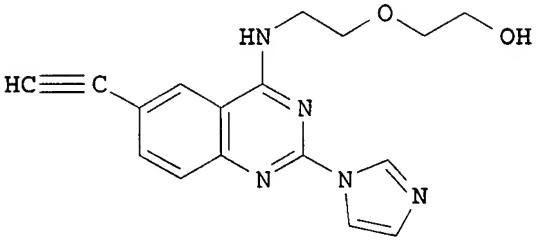
L4 ANSWER 17 OF 40 ZCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1995:795361 ZCAPLUS
DOCUMENT NUMBER: 124:29779
TITLE: 4-Aminoquinazoline derivatives as inhibitors of cGMP phosphodiesterase and TXA2 synthetase
INVENTOR(S): Lee, Sung J.; Konishi, Yoshitaka; Macina, Orest T.; Kondo, Kigen; Yu, Dingwei T.
PATENT ASSIGNEE(S): Ono Pharmaceutical Co., Ltd., Japan
SOURCE: U.S., 42 pp. Cont.-in-part of U.S. Ser. No. 76,431, abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5439895	A	19950808	US 1993-154691	19931119
JP 06192235	A	19940712	JP 1993-197039	19930714
CA 2100626	A1	19940116	CA 1993-2100626	19930715
KR 191416	B1	19990615	KR 1993-13549	19930715
AT 208771	T	20011115	AT 1993-305557	19930715
ES 2167325	T3	20020516	ES 1993-305557	19930715
PT 579496	T	20020531	PT 1993-305557	19930715
JP 08099962	A	19960416	JP 1995-264667	19950920
JP 2923742	B2	19990726		

PRIORITY APPLN. INFO.: US 1992-913473 B2 19920715
US 1993-76431 B2 19930614
OTHER SOURCE(S): MARPAT 124:29779
GI



I



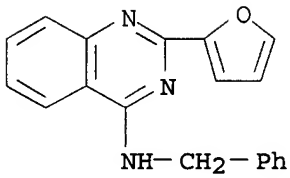
II

AB The compds. of the formula I and acid addition salts thereof, salts thereof, and hydrates thereof wherein R1 is hydrogen or C1-4 alkyl; Y is C1-6 alkylene; A is OR0 or S(O)pR0, in which R0 is C1-4 alkyl-hydroxy; p is 0-2; Z is single bond, methylene, ethylene, vinylene or ethynylene; CyB is (1) 7-membered, unsatd. or partially saturated, monocyclic hetero ring containing as hetero atoms, one, two or three nitrogen atoms, (2) 6-membered, unsatd. or partially saturated, monocyclic hetero ring containing as hetero atoms, two or three nitrogen atoms, (3) 6-membered, unsatd. or partially saturated, monocyclic hetero ring containing as hetero atom, one nitrogen atom, (4) 4- or 5-membered, unsatd. or partially saturated, monocyclic hetero ring containing as hetero atoms, one, two or three nitrogen atoms, or (5) 4-7 membered, unsatd. or partially saturated, monocyclic hetero ring containing as hetero atoms, one or two oxygen atoms, or one or two sulfur atoms; R3 = e.g., H, C1-4 alkyl, C1-4 alkoxy; R4 = e.g., H, C1-4 alkyl, C1-4 alkoxy; and m and n independently are 1 or 2; with the proviso that (1) a CyB ring does not bond to Z through a nitrogen atom in the CyB ring when Z is vinylene or ethynylene, have inhibitory effect on cGMP-PDE, and addnl. on TXA2 synthetase. Thus, e.g., 2-(1-imidazolyl)-4-[2-(2-hydroxyethoxy)ethyl]amino-6-ethynylquinazoline.2HCl (II.2HCl) (prepared by desilylation of a silylacetylene precursor) exhibited inhibitory effect on cGMP-PDE and TXA2 synthetase with IC50 = 4.6 + 10-8 M and 1.33 + 10-6 M, resp. Pharmaceutical formulations were given.

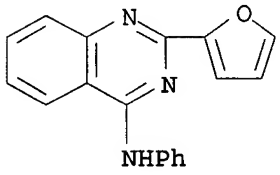
IT 157863-03-1P 157863-04-2P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(4-aminoquinazoline derivs. as inhibitors of cGMP phosphodiesterase and TXA2 synthetase)

RN 157863-03-1 ZCAPLUS

CN 4-Quinazolinamine, 2-(2-furanyl)-N-(phenylmethyl)- (9CI) (CA INDEX NAME)



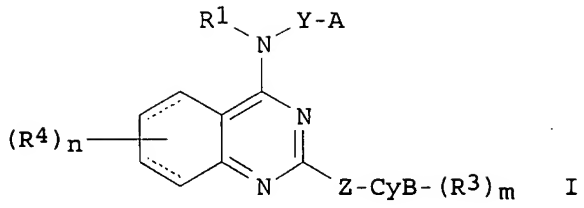
RN 157863-04-2 ZCAPLUS
CN 4-Quinazolinamine, 2-(2-furanyl)-N-phenyl- (9CI) (CA INDEX NAME)



L4 ANSWER 18 OF 40 ZCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1995:761961 ZCAPLUS
DOCUMENT NUMBER: 123:340173
TITLE: 4-Aminoquinazoline derivatives as inhibitors of cyclic guanosine 3',5'-monophosphate phosphodiesterase and thromboxane A2 synthetase
INVENTOR(S): Lee, Sung J.; Konishi, Yoshitaka; Macina, Orest T.; Kondo, Kigen; Yu, Dingwei T.
PATENT ASSIGNEE(S): Ono Pharmaceutical Co., Ltd., Japan
SOURCE: U.S., 44 pp. Cont.-in-part of U.S. Ser. No. 76,431, abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5436233	A	19950725	US 1993-154518	19931119
JP 06192235	A	19940712	JP 1993-197039	19930714
CA 2100626	A1	19940116	CA 1993-2100626	19930715
KR 191416	B1	19990615	KR 1993-13549	19930715
AT 208771	T	20011115	AT 1993-305557	19930715
ES 2167325	T3	20020516	ES 1993-305557	19930715
PT 579496	T	20020531	PT 1993-305557	19930715
JP 08099962	A	19960416	JP 1995-264667	19950920
JP 2923742	B2	19990726		

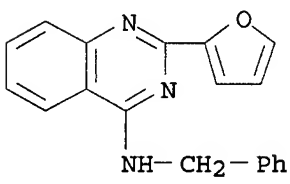
PRIORITY APPLN. INFO.: US 1992-913473 B2 19920715
US 1993-76431 B2 19930614
OTHER SOURCE(S): CASREACT 123:340173; MARPAT 123:340173
GI



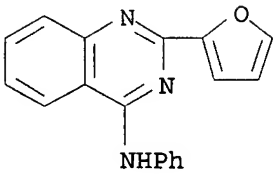
AB Title compds. I [R1 is H, C1-4 alkyl; Y is a single bond or C1-6 alkylene; A is (i) CyA-(R2)l, (ii) OR0 or S(O)pR0 in which R0 is R0A or R0B; R0A is CyA-(R2)l; R0B is H or C1-4 alkyl; p is 0-2; CyA is, e.g., (1) 3-7 membered, saturated or unsatd., monocyclic carbocyclic ring, (2) 7-membered, unsatd. or partially saturated, monocyclic hetero ring containing as hetero atoms, one nitrogen atom, one nitrogen and one oxygen atoms, two nitrogen and one oxygen atoms, or one nitrogen and two oxygen atoms, (3) 6-membered, unsatd. or partially saturated, monocyclic hetero ring containing as hetero atoms, one nitrogen and one oxygen atoms, two nitrogen and one oxygen atoms, or one nitrogen and two oxygen atoms; R2 is R2A or R2B; R2A is, e.g., CF3, OCF3; R2B is, e.g., H, C1-4 alkyl, C1-4 alkoxy; Z is ZA or ZB, ZA is methylene, ethylene, vinylene, ethynylene; ZB is a single bond; CyB is, e.g., (1) 7-membered, unsatd. or partially saturated, monocyclic hetero ring containing as hetero atoms, one, two or three nitrogen atoms, (2) 6-membered, unsatd. or partially saturated, monocyclic hetero ring containing as hetero atoms, two or three nitrogen atoms, (3) 6-membered, unsatd. or partially saturated, monocyclic hetero ring containing as a hetero atom, one nitrogen atom; R3 = e.g., H, C1-4 alkyl; R4 = e.g., NHSO2R11, R11 = e.g., C1-4 alkyl; l, m, n are independently 1 or 2 (with provisos)] are provided as inhibitors of cGMP-PDE and TXA2 synthetase. Thus, e.g., treatment of 2-(1-imidazolyl)-4-(2-methoxyethyl)amino-6-(2-triethylsilylethynyl)quinazoline (preparation given) with tetrabutylammonium fluoride afforded 6-ethynyl-4-(2-methoxyethyl)amino-2-(1-imidazolyl)quinazoline (II); II.2HCl demonstrated inhibition of cGMP-PDE with and TXA2 synthetase with IC50 = 4.6 + 10-8 and 2.4 + 10-6 M, resp. Pharmaceutical formulations were given.

IT 157863-03-1P 157863-04-2P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(4-aminoquinazoline derivs. as inhibitors of cyclic guanosine 3',5'-monophosphate phosphodiesterase and thromboxane A2 synthetase)

RN 157863-03-1 ZCAPLUS
CN 4-Quinazolinamine, 2-(2-furanyl)-N-(phenylmethyl)- (9CI) (CA INDEX NAME)



RN 157863-04-2 ZCAPLUS
CN 4-Quinazolinamine, 2-(2-furanyl)-N-phenyl- (9CI) (CA INDEX NAME)

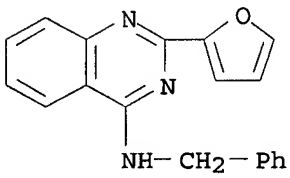


L4 ANSWER 19 OF 40 ZCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1995:746792 ZCAPLUS
DOCUMENT NUMBER: 123:132021
TITLE: Discovery of Potent Cyclic GMP Phosphodiesterase Inhibitors. 2-Pyridyl- and 2-Imidazolylquinazolines Possessing Cyclic GMP Phosphodiesterase and Thromboxane Synthesis Inhibitory Activities
AUTHOR(S): Lee, Sung J.; Konishi, Yoshitaka; Yu, Dingwei T.; Miskowski, Tamara A.; Riviello, Christopher M.; Macina, Orest T.; Frierson, Manton R.; Kondo, Kigen; Sugitani, Masafumi; et al.
CORPORATE SOURCE: Biofor Inc., Waverly, PA, 18471, USA
SOURCE: Journal of Medicinal Chemistry (1995), 38(18), 3547-57
CODEN: JMCMAR; ISSN: 0022-2623
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

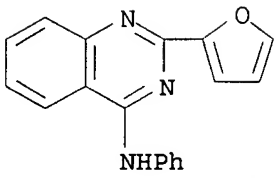
AB Moderate cyclic GMP phosphodiesterase (cGMP-PDE, PDE V) inhibitor 2-phenyl-4-anilinoquinazoline (I) was identified utilizing MultiCASE assisted drug design (MCADD) technol. Modification of I was conducted at the 2-, 4-, and 6-positions of the quinazoline ring for enhancement of cGMP-PDE inhibitory activity. The 6-substituted 2-(imidazol-1-yl)quinazolines are 1000 times more potent in in vitro PDE V enzyme assay than the well-known inhibitor zaprinast. The 6-substituted derivs. of 2-(3-pyridyl)quinazoline and 2-(imidazol-1-yl)quinazoline exhibited more than 1000-fold selectivity for PDE V over the other four PDE isoenzymes. In addition, 3 cGMP-PDE inhibitors were found to have an addnl. property of thromboxane synthesis inhibitory activity.

IT 157863-03-1P 157863-04-2P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(pyridyl- and imidazolylquinazolines as cyclic GMP phosphodiesterase and thromboxane synthesis inhibitors)

RN 157863-03-1 ZCAPLUS
CN 4-Quinazolinamine, 2-(2-furanyl)-N-(phenylmethyl)- (9CI) (CA INDEX NAME)



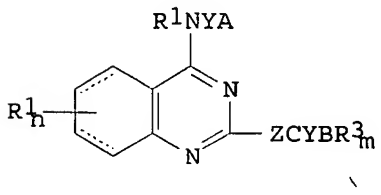
RN 157863-04-2 ZCAPLUS
CN 4-Quinazolinamine, 2-(2-furanyl)-N-phenyl- (9CI) (CA INDEX NAME)



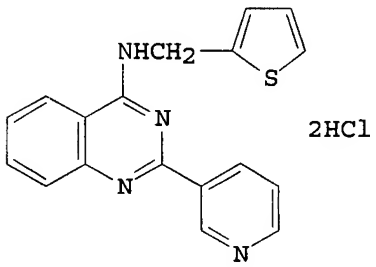
L4 ANSWER 20 OF 40 ZCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1994:605373 ZCAPLUS
DOCUMENT NUMBER: 121:205373
TITLE: 4-aminoquinazoline derivatives, and their use as medicine
INVENTOR(S): Lee, Sung Jai; Konishi, Yoshitaka; Macina, Orest Taras; Kondo, Kigen; Yu, Dingwei Tim
PATENT ASSIGNEE(S): Ono Pharmaceutical Co., Ltd., Japan
SOURCE: Eur. Pat. Appl., 86 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 579496	A1	19940119	EP 1993-305557	19930715
EP 579496	B1	20011114		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
JP 06192235	A	19940712	JP 1993-197039	19930714
CA 2100626	A1	19940116	CA 1993-2100626	19930715
KR 191416	B1	19990615	KR 1993-13549	19930715
AT 208771	T	20011115	AT 1993-305557	19930715
ES 2167325	T3	20020516	ES 1993-305557	19930715
PT 579496	T	20020531	PT 1993-305557	19930715
JP 08099962	A	19960416	JP 1995-264667	19950920
JP 2923742	B2	19990726		

PRIORITY APPLN. INFO.: US 1992-913473 A 19920715
US 1993-76431 A 19930614
OTHER SOURCE(S): MARPAT 121:205373
GI



I



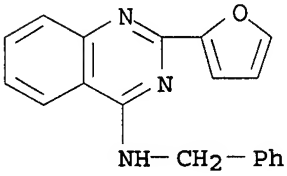
II

AB The title compds. I wherein R1 is H or alkyl; Y is bond or alkylene; A is (i) -CyAR2, (ii) -OR0 or -S(O)pR0, R0 = H, alkyl, etc., p is 0-2, (iii) -NR16R17, R16, R17 are H, alkyl; CyA is (1) a 3-7 membered monocyclic carbocyclic ring, (2) a 4-7 membered monocyclic hetero ring containing as hetero atoms, one N atom, one N and one O atoms, two N and one O atoms, or one N and two O atoms, (3) a 4-7 membered monocyclic hetero ring containing as hetero atoms, 1 or 2 O or S atoms, R2 is (1) H, (2) alkyl, (3) alkoxy, (4)

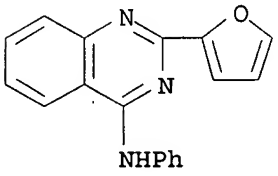
-COOR5, in which R5 is H or alkyl, (5) -NR6R7, R6, R7 are H, alkyl, (6) -SO2NR6R7, (7) halogen, (8) CF3, (9) NO2 or (10) CF3O; Z is bond, methylene, ethylene, vinylene or ethynylene; CyB is a heterocyclic ring; R3 is H, alkyl, alkoxy, halogen or CF3; R4 is H, alkyl, alkoxy, etc., and acid addition salts thereof, salts thereof, and hydrates thereof were prepared and have inhibitory effect on cGMP-PDE, or addnl. on TXA2 synthetase. Thus, a representative prepared compound II had inhibitory activity IC50 of 3.6 x 10-7 on cGMP-PDE.

IT 157863-03-1P 157863-04-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as cardiovascular agents)

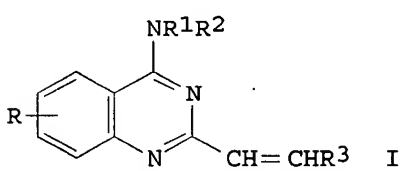
RN 157863-03-1 ZCAPLUS
CN 4-Quinazolinamine, 2-(2-furanyl)-N-(phenylmethyl)- (9CI) (CA INDEX NAME)



RN 157863-04-2 ZCAPLUS
CN 4-Quinazolinamine, 2-(2-furanyl)-N-phenyl- (9CI) (CA INDEX NAME)



L4 ANSWER 21 OF 40 ZCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1987:32975 ZCAPLUS
DOCUMENT NUMBER: 106:32975
TITLE: 4-Amino-2-styrylquinazolines - a new class of antiprotozoal drugs
AUTHOR(S): Moskalenko, N. Yu.; Yakhontov, L. N.; Zhikhareva, G. P.; Pershin, G. N.; Peters, V. V.; Evstratova, M. I.; Mastafanova, L. I.; Rabinovich, S. A.; Maksakovskaya, E. V.; Kulikovskaya, I. M.
CORPORATE SOURCE: Vses. Nauchno-Issled. Khim.-Farm. Inst. im. Ordzhonikidze, Moscow, USSR
SOURCE: Khimiko-Farmatsevticheskii Zhurnal (1986), 20(4), 437-46
CODEN: KHFZAN; ISSN: 0023-1134
DOCUMENT TYPE: Journal
LANGUAGE: Russian
OTHER SOURCE(S): CASREACT 106:32975
GI

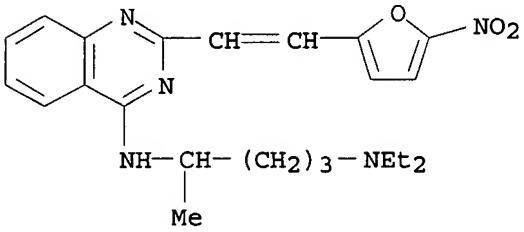


I

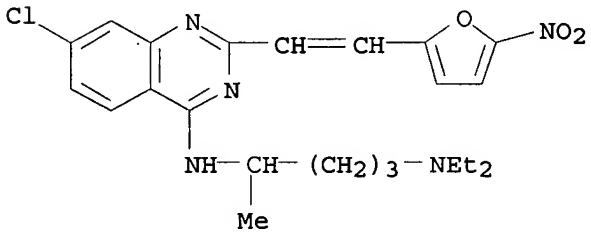
AB 4-Amino-2-styrylquinazolines (I, R = H, 6-OMe, 7-Cl or 6-NO2; NR1R2 = NHCHMe(CH2)3NEt2, Et2N, piperidino or PhNH; and R3 = 4-aminophenyl, 2-nitrophenyl, 4-nitrophenyl, 2-anisyl, 2-(2-nitrofuryl), or halophenyl, etc.,) were prepared by the reaction of the corresponding N-substituted-2-methylquinazolines with suitable aldehydes. Various pharmacol. activities of these compds., e.g., trypanosomicidal, amebicidal, protozoacidal, antimalarial, etc., were determined The LD50 for these compds. are tabulated. Against protozoal infections, 4-(δ-diethylamino-α-methylbutylamino)-2-styrylquinazoline with a p-nitro group in the styrene ring showed the highest activity. Replacement of the nitro group by halogen atoms decreased the protozoacidal activity. The presence of the 4-δ-diethylamino-α-methylbutylamino group in styrylquinazolines is necessary for exhibiting the antileishmaniasis activity. Other structure-activity correlations are discussed.

IT 57942-39-9P 69258-64-6P 105997-20-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and protozoacidal activity of)

RN 57942-39-9 ZCAPLUS
CN 1,4-Pentanediamine, N1,N1-diethyl-N4-[2-[2-(5-nitro-2-furanyl)ethenyl]-4-quinazolinyl]- (9CI) (CA INDEX NAME)

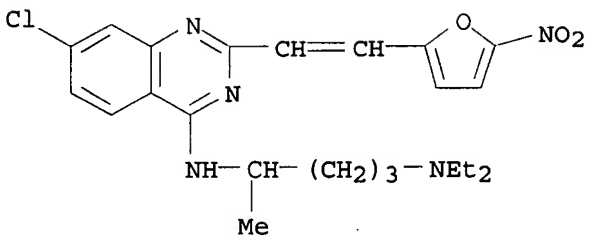


RN 69258-64-6 ZCAPLUS
CN 1,4-Pentanediamine, N4-[7-chloro-2-[2-(5-nitro-2-furanyl)ethenyl]-4-quinazolinyl]-N1,N1-diethyl- (9CI) (CA INDEX NAME)



RN 105997-20-4 ZCAPLUS
CN 1,4-Pentanediamine, N4-[7-chloro-2-[2-(5-nitro-2-furanyl)ethenyl]-4-quinazolinyl]-N1,N1-diethyl-, dihydrochloride (9CI) (CA INDEX NAME)

10/ 567,660

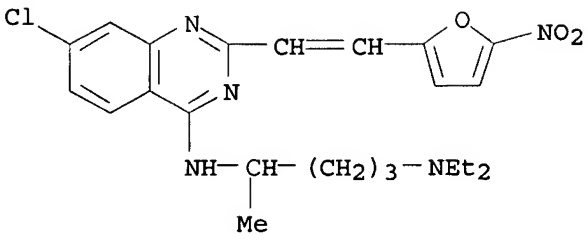


●2 HCl

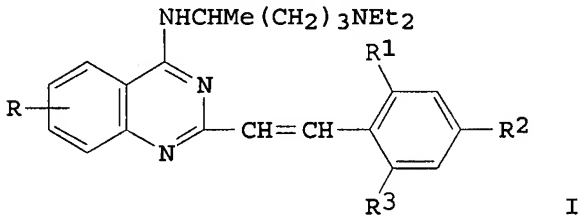
L4 ANSWER 22 OF 40 ZCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1980:514434 ZCAPLUS
DOCUMENT NUMBER: 93:114434
TITLE: Synthesis and antiinflammatory activity of substituted 2-styryl-4-[δ-diethylamino-α-methylbutylamino]-6-nitro- and 2-styryl-4-[δ-diethylamino-α-methylbutylamino]-6-aminoquinazolines
AUTHOR(S): Zhikhareva, G. P.; Mastafanova, L. I.; Evstratova, M. I.; Shvarts, G. Ya.; Syubaev, R. D.; Mashkovskii, M. D.; Yakhontov, L. N.
CORPORATE SOURCE: Vses. Nauchno-Issled. Khim.-Farm. Inst., Moscow, USSR
SOURCE: Khimiko-Farmatsevticheskii Zhurnal (1980), 14(2), 45-9
CODEN: KHFZAN; ISSN: 0023-1134
DOCUMENT TYPE: Journal
LANGUAGE: Russian
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

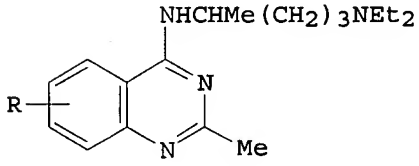
AB Treatment of 2-methyl-6-nitro-4-quinazolone with POCl3 gave 51% quinazoline I (R = Cl) which was converted to 76% I (R = CHMe(CH2)3NEt2) (II) by reaction with the appropriate amine. Condensation of aldehydes with II gave III (R1 = NO2, R2-6 = F; R2 = R4 = R6 = Cl, R3 = R5 = H), which were reduced to give III (R4 = NH2). II (R1 = NH2, NO2), IV (R1 = R3 = H, R2 = R4 = Cl; R2 = R3 = H, R1 = R4 = Cl; R2 = R4 = H, R1 = Cl, R3 = MeO; R1 = R3 = H, R2 = NO2, R4 = Cl; R1 = R4 = H, R2 = NO2, R3 = MeO) and 14 V (R1, R2, R3, R4, R5 = Cl, MeO, Br, H, NO2) were tested for their antiinflammatory, analgesic and antipyretic activity and most had LD >1000 mg/kg. Several of the compds. had biol. activity.
IT 69258-64-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation, antipyretic, antiinflammatory, and analgesic activity of)
RN 69258-64-6 ZCAPLUS
CN 1,4-Pentanediamine, N4-[7-chloro-2-[2-(5-nitro-2-furanyl)ethenyl]-4-quinazolinyl]-N1,N1-diethyl- (9CI) (CA INDEX NAME)



L4 ANSWER 23 OF 40 ZCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1979:121527 ZCAPLUS
DOCUMENT NUMBER: 90:121527
TITLE: Synthesis and study of the antiviral activity of substituted 4-(δ-diethylamino-α-methylbutylamino)-2-styrylquinazolines
AUTHOR(S): Zhikhareva, G. P.; Mastafanova, L. I.; Bogdanova, N. S.; Peters, V. V.; Nikolaeva, I. S.; Pershin, G. N.; Yakhontov, L. N.
CORPORATE SOURCE: Vses. Nauchno-Issled. Khim.-Farm. Inst., Moscow, USSR
SOURCE: Khimiko-Farmatsevticheskii Zhurnal (1978), 12(11), 44-8
CODEN: KHFZAN; ISSN: 0023-1134
DOCUMENT TYPE: Journal
LANGUAGE: Russian
OTHER SOURCE(S): CASREACT 90:121527
GI



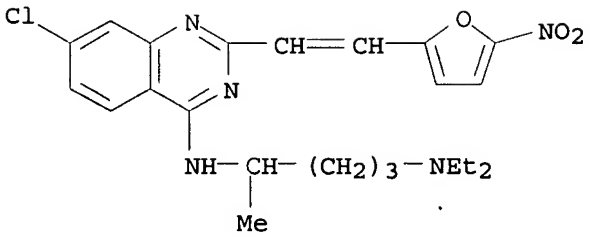
I



II

AB The title compds. I (R = H, 7-Cl, 6-MeO, R1 = Cl, Br, H, R2 = H, Br, Cl, NO2, R3 = H, Cl) and their hydrochlorides, useful as virucides, were obtained in 41-56% yields by condensation of II with substituted benzaldehydes.

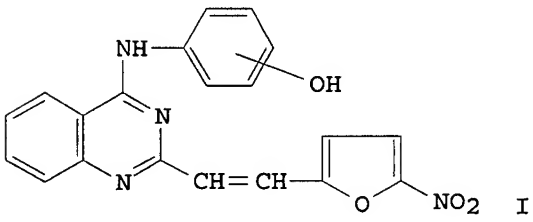
IT 69258-64-6P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation and virucidal activity of)
RN 69258-64-6 ZCAPLUS
CN 1,4-Pentanediamine, N4-[7-chloro-2-[2-(5-nitro-2-furanyl)ethenyl]-4-quinazolinyl]-N1,N1-diethyl- (9CI) (CA INDEX NAME)



L4 ANSWER 24 OF 40 ZCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1977:16693 ZCAPLUS
DOCUMENT NUMBER: 86:16693
TITLE: 2-[2-(5-Nitro-2-furyl)vinyl]-4-(hydroxyanilino)quinazolines
INVENTOR(S): Horn, Herman; Greenbaum, Sheldon B.; Ely, Charles M.; Hacke, Walter; Olle, David A.
PATENT ASSIGNEE(S): Diamond Shamrock Corp., USA
SOURCE: U.S., 9 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

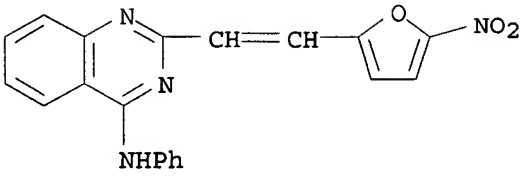
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3970648	A	19760720	US 1974-503854	19740906
US 3973021	A	19760803	US 1975-567499	19750414
US 3974277	A	19760810	US 1975-570645	19750423

PRIORITY APPLN. INFO.: US 1974-503854 A3 19740906
GI

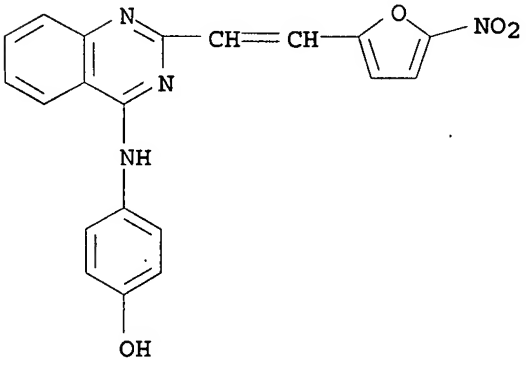


I

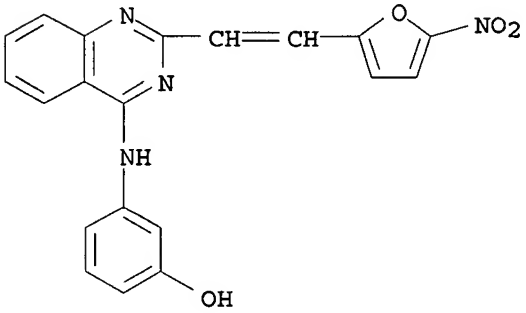
AB The title compds. I, bactericides and growth promoters for chicks, and the bactericidal anilino analog were prepared from the 4-chloroquinazoline analog. Thus, 9.05 g the 4-chloro analog of I, prepared by chlorination of the condensation product of 5-nitro-2-furancarboxaldehyde and 2-methyl-4(3H)quinazolinone, and 8 g 4-H2NC6H4OH in DMF was heated 2 hr at 70-90° to give 6-5 g I (OH in 4-position).
IT 60535-07-1P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation and bactericidal activity of)
RN 60535-07-1 ZCAPLUS
CN 4-Quinazolinamine, 2-[2-(5-nitro-2-furanyl)ethenyl]-N-phenyl- (9CI) (CA INDEX NAME)



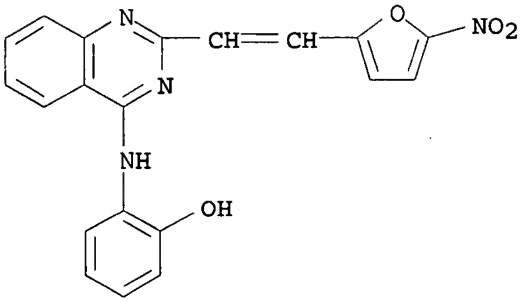
IT 60452-41-7 60452-42-8 60452-43-9
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation as bactericidal and animal growth substances)
RN 60452-41-7 ZCAPLUS
CN Phenol, 4-[[2-[2-(5-nitro-2-furanyl)ethenyl]-4-quinazolinyl]amino]- (9CI)
(CA INDEX NAME)



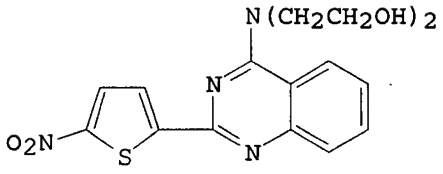
RN 60452-42-8 ZCAPLUS
CN Phenol, 3-[[2-[2-(5-nitro-2-furanyl)ethenyl]-4-quinazolinyl]amino]- (9CI)
(CA INDEX NAME)



RN 60452-43-9 ZCAPLUS
CN Phenol, 2-[[2-[2-(5-nitro-2-furanyl)ethenyl]-4-quinazolinyl]amino]- (9CI)
(CA INDEX NAME)



L4 ANSWER 25 OF 40 ZCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1976:572499 ZCAPLUS
DOCUMENT NUMBER: 85:172499
TITLE: Comparative carcinogenicity of 5-nitrothiophenes and 5-nitrofurans in rats
AUTHOR(S): Cohen, Samuel M.; Erturk, E.; Bryan, George T.
CORPORATE SOURCE: Cent. Health Sci., Univ. Wisconsin, Madison, WI, USA
SOURCE: Journal of the National Cancer Institute (1940-1978) (1976), 57(2), 277-82
CODEN: JNCIAM; ISSN: 0027-8874
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



I

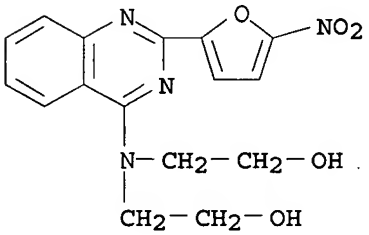
AB The carcinogenicity of five 5-nitrothiophenes with heterocyclic substituents at the 2-position of the thiophene ring was investigated by feeding the chems. to Sprague-Dawley rats and comparing the type and incidence of lesions with those appearing after exposure to two 5-nitrofurans. Benign and malignant mammary tumors and intestinal tract sarcomas were the most frequent lesions induced by 5-nitrothiophenes. 4-Bis(2-hydroxyethyl)amino-2-(5-nitro-2-thienyl)quinazoline (I) [33372-39-3] caused a 100% incidence of mammary adenocarcinomas in 28 female rats at risk; it induced 3 benign and 5 malignant mammary tumors and 13 small intestine sarcomas in 20 male rats. A high incidence of similar lesions was observed in male and female rats fed the corresponding 5-nitrofuran analogue, 4-bis(2-hydroxyethyl)amino-2-(5-nitro-2-furyl)quinazoline [5055-20-9]. In marked contrast, 4 of 28 female rats receiving 4-bis(2-hydroxyethyl)amino-2-(2-thienyl)quinazoline [58139-47-2], which lacks the nitro group at the 5-position on the thiophene ring, had solitary benign mammary tumors. Addnl. 5-nitrothiophenes demonstrating significant oncogenic activity for female rats were 4-morpholino-2-(5-nitro-2-thienyl)quinazoline [58139-48-3], 4-(2-hydroxyethylamino)-2-(5-nitro-2-thienyl)quinazoline [33389-36-5], 4-(2,3-dihydroxypropylamino)-2-(5-nitro-2-thienyl)quinazoline [33372-40-6], and 1,2-dihydro-2-(5-nitro-2-thienyl)quinazolin-4(3H)-one [33389-33-2]. Another nitrofuran, 4,6-dimethyl-2-(5-nitro-2-furyl)-pyrimidine [59-35-8], provided the following types of neoplasms in 30 female rats at risk: squamous cell carcinomas of the forestomach (30),

sarcomas of the intestine (21), adenocarcinomas of the mammary gland (12), and transitional cell carcinomas of the kidney (2).

IT 5055-20-9
RL: ADV (Adverse effect, including toxicity); BIOL (Biological study) (carcinogenicity of)

RN 5055-20-9 ZCAPLUS

CN Ethanol, 2,2'-[[2-(5-nitro-2-furanyl)-4-quinazolinyl]imino]bis- (9CI) (CA INDEX NAME)



L4 ANSWER 26 OF 40 ZCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1976:558452 ZCAPLUS

DOCUMENT NUMBER: 85:158452

TITLE: 2-[2-(5-Nitro-2-furyl)vinyl]-4-(p-hydroxyanilino)quinazoline as a bactericide

INVENTOR(S): Horn, Herman; Greenbaum, Sheldon B.; Ely, Charles M.; Hacke, Walter; Olle, David A.

PATENT ASSIGNEE(S): Diamond Shamrock Corp., USA

SOURCE: U.S., 9 pp.
CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

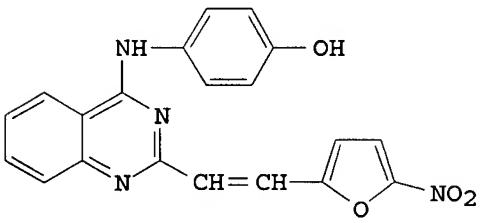
FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3973021	A	19760803	US 1975-567499	19750414
US 3970648	A	19760720	US 1974-503854	19740906

PRIORITY APPLN. INFO.: US 1974-503854 A3 19740906

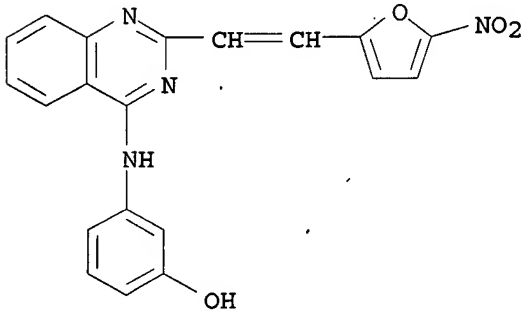
GI



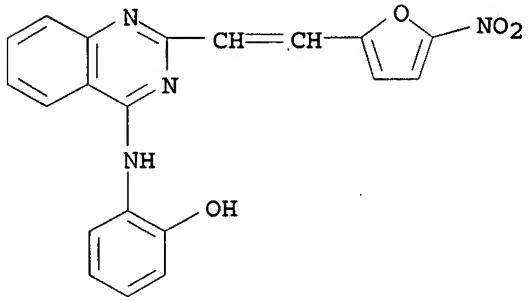
I

AB 2-[2-(5-Nitro-2-furyl)vinyl]-4-(p-hydroxyanilino)quinazoline (I) [60452-41-7] and similar quinazolines are effective as bactericides and animal growth promoting agents. Thus, broiler chicks given I at 200 g/ton of feed gained 6.5% more weight than controls fed the basal ration plus bacitracin in 4-week expts.; bacitracin plus chlortetracycline at 4 and 200 g/ton, resp. gave only 5.5% better growth,as compared to controls.. Feed efficiency also was improved with addition of I by 7.2% as compared to 6.6% with chlortetracycline.

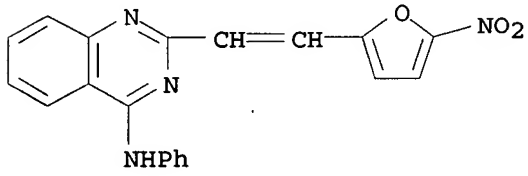
IT 60452-42-8P 60452-43-9P 60535-07-1P
RL: PREP (Preparation)
(preparation and feeding experiment on chicks with)
RN 60452-42-8 ZCAPLUS
CN Phenol, 3-[[2-[2-(5-nitro-2-furanyl)ethenyl]-4-quinazolinyl]amino]- (9CI) (CA INDEX NAME)



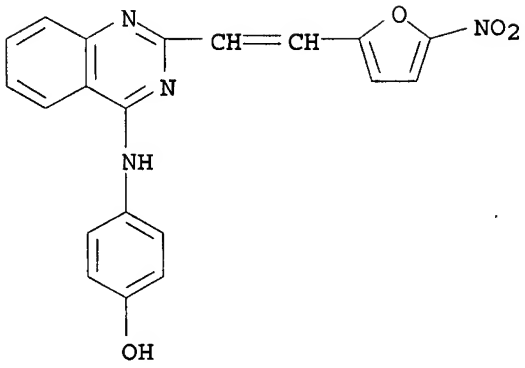
RN 60452-43-9 ZCAPLUS
CN Phenol, 2-[[2-[2-(5-nitro-2-furanyl)ethenyl]-4-quinazolinyl]amino]- (9CI) (CA INDEX NAME)



RN 60535-07-1 ZCAPLUS
CN 4-Quinazolinamine, 2-[2-(5-nitro-2-furanyl)ethenyl]-N-phenyl- (9CI) (CA INDEX NAME)



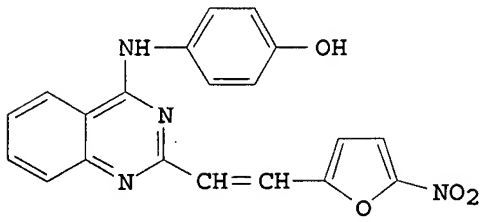
IT 60452-41-7P
RL: PREP (Preparation)
(preparation and feeding expts. with, on chicks and pigs)
RN 60452-41-7 ZCAPLUS
CN Phenol, 4-[[2-[2-(5-nitro-2-furanyl)ethenyl]-4-quinazolinyl]amino]- (9CI) (CA INDEX NAME)



L4 ANSWER 27 OF 40 ZCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1976:541790 ZCAPLUS
DOCUMENT NUMBER: 85:141790
TITLE: 2-[2-(5-Nitro-2-furyl)vinyl]-4-(anilino)quinazolines as growth promotants and feed efficiency enhancing agents
INVENTOR(S): Horn, Herman; Greenbaum, Sheldon B.; Ely, Charles M.; Hacke, Walter; Olle, David A.
PATENT ASSIGNEE(S): Diamond Shamrock Corp., USA
SOURCE: U.S., 10 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3974277	A	19760810	US 1975-570645	19750423
US 3970648	A	19760720	US 1974-503854	19740906

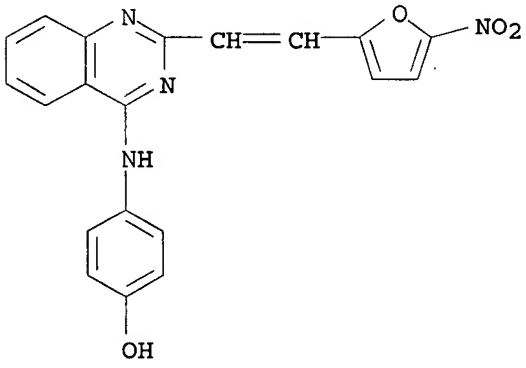
PRIORITY APPLN. INFO.: US 1974-503854 A3 19740906
GI



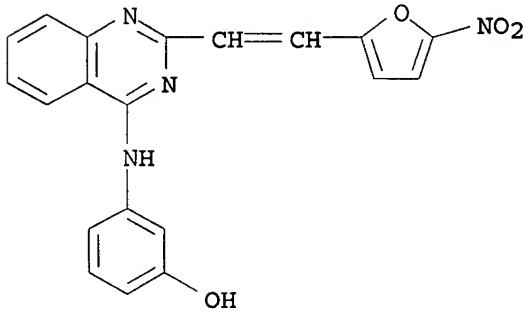
I

AB The title compds. and derivs. are prepared and found useful as bactericides and animal growth promotants. For example, 2-[2-(5-nitro-2-furyl)vinyl]-4-(p-hydroxyanilino)quinazoline (I) [60452-41-7], prepared by reacting 2-[2-(5-nitro-2-furyl)vinyl]-4-chloroquinazoline [36952-05-3] with p-aminophenol [123-30-8], when added at 200 g/ton to a com.-type chick starter ration containing 4 g bacitracin/ton, increased 4-week growth and feed efficiency to 106 and 107%, resp., of that obtained from the com. diet + bacitracin alone.
IT 60452-41-7P
RL: PREP (Preparation)
(preparation and bactericidal and animal growth promotant properties of)

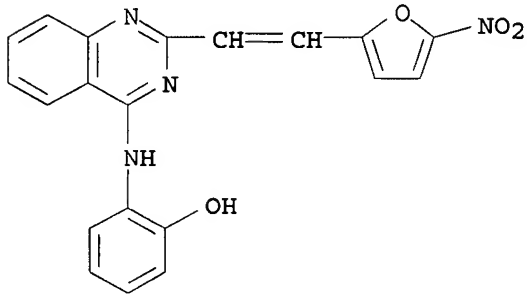
RN 60452-41-7 ZCAPLUS
CN Phenol, 4-[[2-[2-(5-nitro-2-furanyl)ethenyl]-4-quinazolinyl]amino]- (9CI) (CA INDEX NAME)



IT 60452-42-8P 60452-43-9P
RL: PREP (Preparation)
(preparation and bactericidal and animal growth stimulant properties of)
RN 60452-42-8 ZCAPLUS
CN Phenol, 3-[[2-[2-(5-nitro-2-furanyl)ethenyl]-4-quinazolinyl]amino]- (9CI) (CA INDEX NAME)



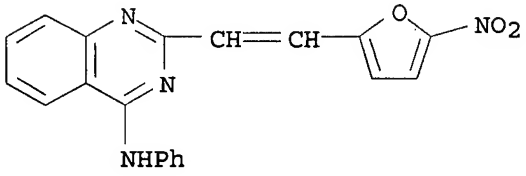
RN 60452-43-9 ZCAPLUS
CN Phenol, 2-[[2-[2-(5-nitro-2-furanyl)ethenyl]-4-quinazolinyl]amino]- (9CI) (CA INDEX NAME)



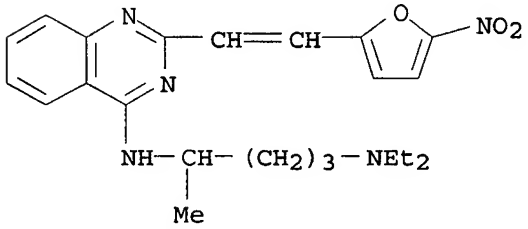
IT 60535-07-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and bactericidal properties of)
RN 60535-07-1 ZCAPLUS

10/ 567,660

CN 4-Quinazolinamine, 2-[2-(5-nitro-2-furanyl)ethenyl]-N-phenyl- (9CI) (CA INDEX NAME)



L4 ANSWER 28 OF 40 ZCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1976:43974 ZCAPLUS
DOCUMENT NUMBER: 84:43974
TITLE: Synthesis and study of the biological activity of substituted 4-amino-2-styrylquinazolines
AUTHOR(S): Yakhontov, L. N.; Zhikhareva, G. P.; Pronina, E. V.; Pershin, G. N.; Liberman, S. S.; Padeiskaya, E. N.; Zykova, T. N.; Gus'kova, T. A.; Berlyand, E. A.
CORPORATE SOURCE: Vses. Nauchno-Issled. Khim.-Farm. Inst. im. Ordzhonikidze, Moscow, USSR
SOURCE: Khimiko-Farmatsevticheskii Zhurnal (1975), 9(11), 12-18
CODEN: KHFZAN; ISSN: 0023-1134
DOCUMENT TYPE: Journal
LANGUAGE: Russian
OTHER SOURCE(S): CASREACT 84:43974
GI For diagram(s), see printed CA Issue.
AB Aminostyrylquinazolines [I, R = Cl, H, NR1R2 = Et2N, PhNH, PhCH2NH, Et2N(CH2)3CHMeNH, piperidino, R3 = o-, p-Cl, p-O2N] were obtained in 28-66% yields in 5 steps from anthranilic acid derivs. by cyclocondensation with Ac2O, treatment with NH3 to give II, chlorination with POCl3, amination with R1R2NH, and condensation with the corresponding aromatic aldehyde. I were effective bactericides against Mycobacterium tuberculosis at 0.25-0.5 μg/ml.
IT 57942-39-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 57942-39-9 ZCAPLUS
CN 1,4-Pentanediamine, N1,N1-diethyl-N4-[2-[2-(5-nitro-2-furanyl)ethenyl]-4-quinazolinyl]- (9CI) (CA INDEX NAME)



L4 ANSWER 29 OF 40 ZCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1975:479282 ZCAPLUS
DOCUMENT NUMBER: 83:79282
TITLE: Bactericidal and antihypertensive 4-aminoquinazoline compounds
INVENTOR(S): Nauta, Wijbe T.
PATENT ASSIGNEE(S): N. V. Koninklijke Pharmaceutische Fabrieken Voorheen

10/ 567,660

	Brocades-Stheeman & Pharmacia, Neth.
SOURCE:	Brit., 4 pp. Division of Brit. 1,390,014.
	CODEN: BRXXAA
DOCUMENT TYPE:	Patent
LANGUAGE:	English
FAMILY ACC. NUM. COUNT:	1
PATENT INFORMATION:	

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 1390015	A	19750409	GB 1974-47849	19720505
PRIORITY APPLN. INFO.:			GB 1974-47849 A	19720505

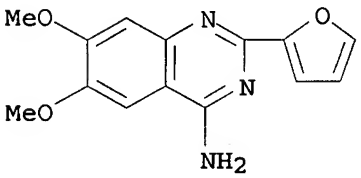
GI For diagram(s), see printed CA Issue.

AB Ten title compds. I (R = pyrrolidyl, 2-, 3-, and 4-pyridyl, 2-furyl, 1-methyl-2-pyrrolyl; R1 = H, Cl, MeO; R2 = H, MeO) were prepared from 2-aminobenzonitriles by treatment with heterocyclic nitriles. Thus, I (R = pyrrolidyl, R1 = R2 = H) was prepared from 2-H2NC6H4CN in Et2O by refluxing with 1-pyrrolidinenitrile 4 hr under N in the presence of PhBr-Li followed by treatment with H2O. I showed bactericidal activity (no data) towards Mycoplasma gallisepticum and Pasteurella multocida. The antihypertensive activities of I were assessed in rats (no data).

IT 56503-36-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(bactericide and antihypertensive, preparation of)

RN 56503-36-7 ZCAPLUS

CN 4-Quinazolinamine, 2-(2-furanyl)-6,7-dimethoxy-, monohydrochloride (9CI) (CA INDEX NAME)



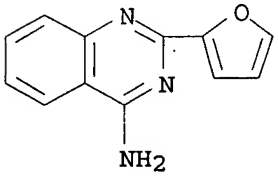
● HCl

L4 ANSWER 30 OF 40 ZCAPLUS COPYRIGHT 2007 ACS on STN

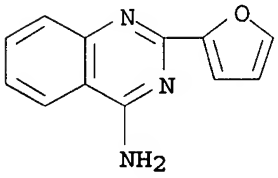
ACCESSION NUMBER:	1973:72180 ZCAPLUS
DOCUMENT NUMBER:	78:72180
TITLE:	Pyrimidine derivatives
PATENT ASSIGNEE(S):	N. V. Koninklijke Pharmaceutische Fabrieken Voorheen Brocades-Stheeman & Pharmacia
SOURCE:	Neth. Appl., 19 pp.
	CODEN: NAXXAN
DOCUMENT TYPE:	Patent
LANGUAGE:	Dutch
FAMILY ACC. NUM. COUNT:	1
PATENT INFORMATION:	

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
NL 7206067	A	19721109	NL 1972-6067	19720505
JP 56001315	B	19810113	JP 1972-44512	19720504
NO 139270	C	19790131	NO 1972-1600	19720505
NO 139270	B	19781023		
SE 406197	C	19790510	SE 1972-5960	19720505

SE 406197 B 19790129
PRIORITY APPLN. INFO.: GB 1971-13802 A 19710507
GI For diagram(s), see printed CA Issue.
AB Aminoquinazolines (I, R = NMe2, NEt2, pyrrolidino, 2-furyl, 2-pyridyl, 1-methyl-2-pyrrolyl, 4-(2-furoyl)-1-piperazinyl; R1 = R2 = H, OMe; R1 = Cl, R2 = H) were prepared by treating the corresponding o-aminobenzonitrile with RCN and PhLi. Thus, reaction of o-H2NC6H4CN with Et2NCN and PhLi gave I (R = NEt2, R1 = R2 = H).
IT 40172-85-8P 40172-86-9P 40173-00-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 40172-85-8 ZCAPLUS
CN 4-Quinazolinamine, 2-(2-furanyl)- (9CI) (CA INDEX NAME)

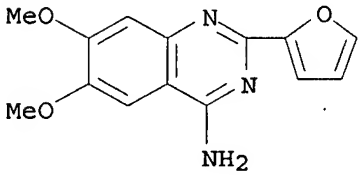


RN 40172-86-9 ZCAPLUS
CN 4-Quinazolinamine, 2-(2-furanyl)-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 40173-00-0 ZCAPLUS
CN 4-Quinazolinamine, 2-(2-furanyl)-6,7-dimethoxy-, hydrochloride (9CI) (CA INDEX NAME)



●x HCl

L4 ANSWER 31 OF 40 ZCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1972:405517 ZCAPLUS
DOCUMENT NUMBER: 77:5517

10/ 567,660

TITLE: 4-Amino-2-[2-(5-nitro-2-furyl)vinyl]quinazolines
INVENTOR(S): Breuer, Hermann
PATENT ASSIGNEE(S): Chemische Fabrik von Heyden A.-G.
SOURCE: Ger. Offen., 12 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

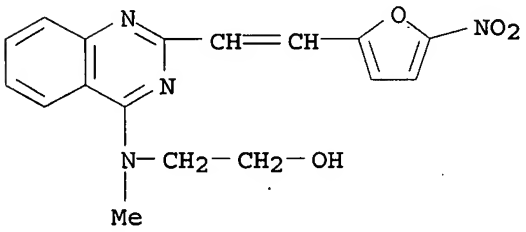
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2140280	A	19720217	DE 1971-2140280	19710811
FR 2102221	A5	19720407	FR 1971-29610	19710812
FR 2102221	B1	19750207		
CH 529781	A	19721031	CH 1971-529781	19710812
PRIORITY APPLN. INFO.:			US 1970-63327 A	19700812

GI For diagram(s), see printed CA Issue.

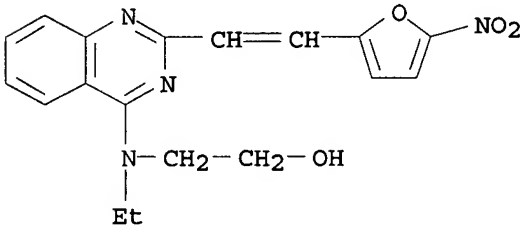
AB Six title compds. [I, R1 = H, R = morpholino (II), N(CH2CH2OH)2 NEtCH2CH2OH or NMeCH2CH2OH; and R = morpholino, R1 = Cl or NO2], useful as antimicrobial agents in animals, were prepared by reaction of I (R = Cl) with amines. Thus I (R = Cl, R1 = H), prepared from 2-methyl-4(3H)-quinazolinone and 5-nitro-2-furaldehyde via 2-[2-(5-nitro-2-furyl)vinyl]-4(3H)-quinazolinone followed by reaction with POCl3 in PhNMe2, was treated with morpholine in PhMe for 0.5 hr at 70-80° to give II.

IT 36951-95-8P 36951-96-9P 36952-03-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

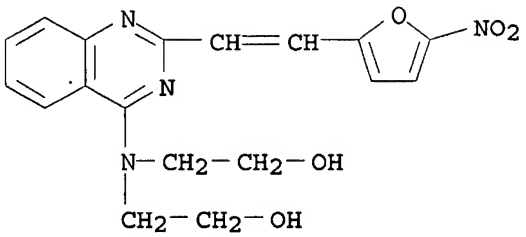
RN 36951-95-8 ZCAPLUS
CN Ethanol, 2-[methyl[2-[2-(5-nitro-2-furanyl)ethenyl]-4-quinazolinyl]amino]-(9CI) (CA INDEX NAME)



RN 36951-96-9 ZCAPLUS
CN Ethanol, 2-[ethyl[2-[2-(5-nitro-2-furanyl)ethenyl]-4-quinazolinyl]amino]-(9CI) (CA INDEX NAME)



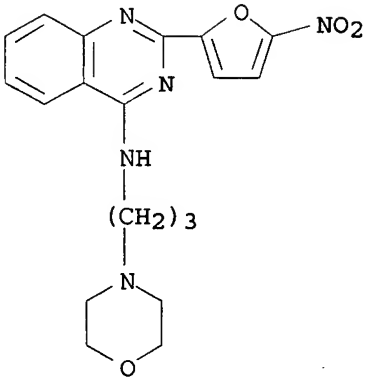
RN 36952-03-1 ZCAPLUS
CN Ethanol, 2,2'-[[2-[2-(5-nitro-2-furanyl)ethenyl]-4-quinazolinyl]imino]bis-(9CI) (CA INDEX NAME)



L4 ANSWER 32 OF 40 ZCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1970:97625 ZCAPLUS
DOCUMENT NUMBER: 72:97625
TITLE: Determination of untreated whole milk effects on in vitro antibacterial activity
AUTHOR(S): Van Natta, J. P.; Lo, P. W.; Chang, Timothy Scott
CORPORATE SOURCE: Res. Develop. Dep., Norwich Pharmacal Co., Norwich, NY, USA
SOURCE: Applied Microbiology (1970), 19(2), 220-3
CODEN: APMBAY; ISSN: 0003-6919
DOCUMENT TYPE: Journal
LANGUAGE: English

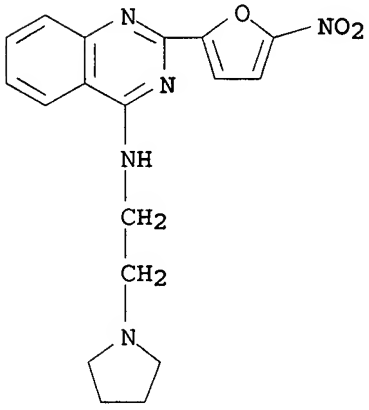
AB The effect of fresh whole milk without pasteurization or other pretreatment on in vitro antibacterial activity of selected compds. was determined in broth dilution The milk was collected by hand directly from dairy goats, or by syringe or cannula from bovine quarters showing low bacterial counts. Antibacterial activity was determined in 50% (v/v) milk-broth medium against sensitive mastitisetiologic strains of Streptococcus agalactiae and Staphylococcus aureus. The indicator sale 2,3,5-triphenyltetrazolium chloride was incorporated in the milk-broth medium to determine inoculum growth. Contaminant interference was circumvented through early as well as late readings and comparisons with uninoculated control tubes, with and without the test compds. Application of the method with more than 75 compds., including nitrofurans, antibiotics, and other chems. uncovered marked degrees of milk interference. The method warrants routine use among preliminary screens to relate in vitro with in vivo observations of antimicrobial activity. Similar procedures may be used with serum, skim milk, or mastitis-milk media for separating effects due to protein, lipid, or other elements in product evaluation.

IT 5489-93-0 27465-08-3 27465-09-4
27465-10-7
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(antibiotic activity of, milk effect on)
RN 5489-93-0 ZCAPLUS
CN 4-Quinazolinamine, N-[3-(4-morpholinyl)propyl]-2-(5-nitro-2-furanyl)-, dihydrochloride (9CI) (CA INDEX NAME)



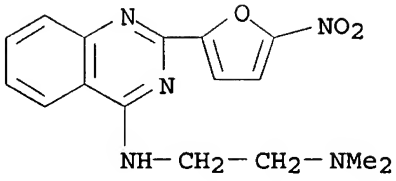
●2 HCl

RN 27465-08-3 ZCAPLUS
CN Quinazoline, 2-(5-nitro-2-furyl)-4-[[2-(1-pyrrolidinyl)ethyl]amino]-, hydrochloride (7CI, 8CI) (CA INDEX NAME)



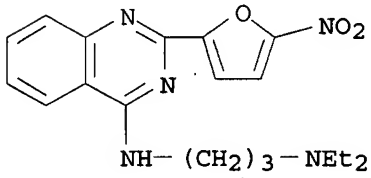
●x HCl

RN 27465-09-4 ZCAPLUS
CN Quinazoline, 4-[[2-(dimethylamino)ethyl]amino]-2-(5-nitro-2-furyl)-, hydrochloride (7CI, 8CI) (CA INDEX NAME)



●x HCl

RN 27465-10-7 ZCAPLUS
CN Quinazoline, 4-[[3-(diethylamino)propyl]amino]-2-(5-nitro-2-furyl)-, hydrochloride (7CI, 8CI) (CA INDEX NAME)



●x HCl

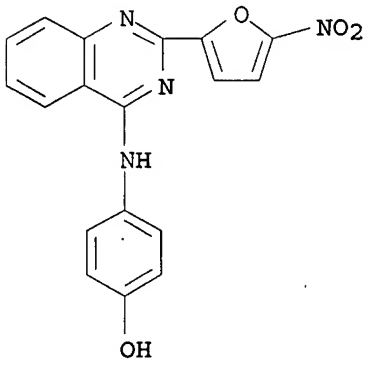
L4 ANSWER 33 OF 40 ZCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1970:31830 ZCAPLUS
DOCUMENT NUMBER: 72:31830
TITLE: Bactericidal 4-(o-, m-, and p-hydroxyanilino)-2-(5-nitro-2-furyl)quinazolines
PATENT ASSIGNEE(S): Norwich Pharmacal Co.
SOURCE: Brit., 3 pp.
CODEN: BRXXAA
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 1168430		19691022	GB 1969-4748	19690128
DE 1909522			DE	
FR 2005591			FR	
US 3542784		19701124	US	19680405
ZA 6900771		19690000	ZA	
PRIORITY APPLN. INFO.:			US	19680405

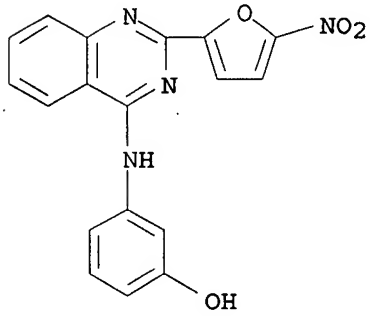
GI For diagram(s), see printed CA Issue.
AB The title compds. (I) in which the OH may be in the 2-, 3-, or 4-position show high in vitro antibacterial activity. A mixture of 35 g II and 28.5 g o-HOC6H4NH2 in 500 ml Me2NCHO was heated on the steam-bath 2 hr to give 35 g I (2-OH) (III), m. 275° (decomposition). Similarly were prepared I (3-OH) (IV), m. 284° (decomposition) and I (4-OH), m. 286-8° (decomposition). I were particularly effective in vitro against animal pathogens.
IT 24912-15-0P 24912-16-1P 24912-17-2P

10/ 567,660

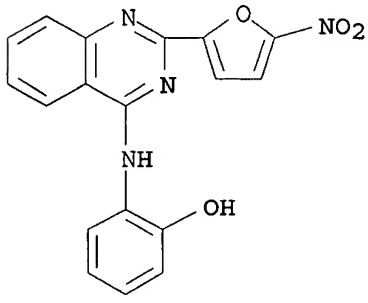
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 24912-15-0 ZCAPLUS
CN Phenol, p-[[2-(5-nitro-2-furyl)-4-quinazolinyl]amino]- (8CI) (CA INDEX NAME)



RN 24912-16-1 ZCAPLUS
CN Phenol, m-[[2-(5-nitro-2-furyl)-4-quinazolinyl]amino]- (8CI) (CA INDEX NAME)



RN 24912-17-2 ZCAPLUS
CN Phenol, o-[[2-(5-nitro-2-furyl)-4-quinazolinyl]amino]- (8CI) (CA INDEX NAME)



L4 ANSWER 34 OF 40 ZCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1966:490697 ZCAPLUS
DOCUMENT NUMBER: 65:90697
ORIGINAL REFERENCE NO.: 65:16981h,16982a-f

10/ 567,660

TITLE: 4-Substituted 2-(5-nitro-2-furyl)quinazolines
INVENTOR(S): Burch, H. A.
PATENT ASSIGNEE(S): Norwich Pharmacal Co.
SOURCE: 17 pp.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
BE 672504		19660316	BE 1967-2504	19651118
PRIORITY APPLN. INFO.:			US	19641214

GI For diagram(s), see printed CA Issue.

AB The title products with general formula (I), useful as antibacterials, are prepared CaCO3 (5 g.) is added to a solution of 6.8 g. o-aminobenzamide in 30 cc. HCONMe2. A solution of 8.75 g. 5-nitrofuroyl chloride in 20 cc. HCONMe2 is added with stirring. The mixture is heated for 1 hr., filtered, and cooled. The precipitate is filtered, and crystallized from HCONMe2 to give 3.9 g.

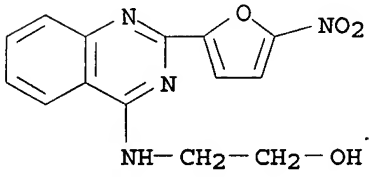
2-(5-nitro-2-furyl)-4(3H)-quinazolinone (II). II (198 g.) is added slowly with stirring to a solution of 159 g. PCl5 in 790 cc. POCl3. The mixture is refluxed for 1 hr., cooled, diluted with 3000 cc. petroleum ether, and cooled again. The precipitate is filtered off and purified by extraction with toluene in a Soxhlet apparatus The toluene solution is cooled, and the precipitate filtered to give 106 g. 4-chloro-2-(5-nitro-2-furyl)quinazoline (III), m. 196.5-8.5°. A solution of 30 g. III and 26.5 g. HOCHMeCH2NH(CH2)2OH in 750 cc. HCONMe2 is heated on a steam bath for 1 hr., diluted with water, and cooled. The precipitate is filtered off to give 18 g. 4-[2-hydroxyethyl (2-hydroxy-1-propyl)amino]-2(5-nitro-2-furyl)quinazoline, m. 165-6° (all m.ps. are corrected) (iso-PrOH). A solution of 40 g. III and 40 g. (HOCHMeCH2)2NH in 500 cc. HCONMe2 is heated on a steam bath for 2 hrs., diluted with water, and cooled to give 39 g. 4-bis(2-hydroxy-1-propyl)amino-2-(5-nitro-2-furyl)quinazoline, m. 169-70°. In the same way, 40 g. III, 36 g. N-butylethanolamine, and 500 cc. HCONMe2 give 39 g. 4-butyl(2-hydroxyethyl)amino-2-(5-nitro-2-furyl)quinazoline, m. 120-1°; 30.2 g. III, 26.3 g. diethanolamine, and 300 cc. HCONMe2 give 22 g. 4-bis(2-hydroxyethyl)amino-2-(5-nitro-2-furyl)quinazoline, m. 167-8°; 35 g. III, 23.1 g. 3-methoxypropylamine, and 500 cc. HCONMe2 give 33 g. 4-(3-methoxypropylamino)-2-(5-nitro-2-furyl)quinazoline, m.p. 143-5°; 35 g. III, 42 g. diethoxyethylamine, and 1000 cc. HCONMe2 give 40 g. 4-bis(2-ethoxyethyl)amino-2-(5-nitro-2-furyl)quinazoline, m. 60-1°; 30.2 g. III, 15 g. 2-ethanolamine, and 800 cc. HCONMe2 give 31 g. 4-(2-hydroxyethyl)amino-2-(5-nitro-2-furyl)quinazoline, m. 221-3°; and 35 g. III, 25 g. N-isopropylethanolamine, and 500 cc. HCONMe2 give 21 g. 4-[(2-hydroxyethyl)isopropylamino]-2-(5-nitro-2-furyl)quinazoline, m. 157-9°. A mixture of 50 g. III, 34 g. N-methylethanolamine, and 1000 cc. benzene is refluxed for 1 hr., and cooled. The precipitate is filtered, suspended in cool water, and alkalized with aqueous NaOH to give 40 g. 4-[(2-hydroxyethyl) methylamino]-2-(5-nitro-2-furyl)-quinazoline, m. 151-2° (HCONMe2-water). A mixture of 40 g. III, 22.5 g. 2-methoxyethylamine, and 1000 cc. benzene is refluxed for 1 hr., cooled, and diluted with petroleum ether to give 26 g. 4-(2-methoxyethyl)amino-2-(5-nitro-2-furyl)quinazoline, m.p. 160-2° (MeOH). A mixture of 30.2 g. III, 36 g. 3-aminopropyl-4-morpholine, and 750 cc. benzene is refluxed for 1.5 hrs., cooled, and diluted with petroleum ether. The precipitate is filtered, suspended in water, and alkalized with aqueous NaOH. The precipitate is filtered to give 42 g. 4-[3-(4-morpholino)propyl]amino-2-(5-nitro-2-furyl)quinazoline

(IV), m. 170.0-1.5°. A solution of 40 g. IV in 500 cc. anhydrous AcOH is saturated with dry HCl while cooling, and diluted with ether to give 30 g. IV.2HCl, m. 211-13°. A solution of 35 g. III, and 19.5 g. 3-amino-1-propanol in 500 cc. HCONMe2 is heated on a steam bath for 1 hr., diluted with water to give 22 g. 4-(3-hydroxy-1-propylamino)-2-(5-nitro-2-furyl)quinazoline, m.p. 180-3° (MeCN). A mixture of 40 g. III, 28.5 g. 80% 2-hydroxyethylhydrazine, and 500 cc. HCONMe2 is left at room temperature for 15 min. and heated at 40°, and then at 60°. The solution is diluted with water to give 35.5 g. 4-[1-(2-hydroxyethyl)hydrazino]-2-(5-nitro-2-furyl)quinazoline, m.p. 190-1° (MeNO2).

IT 5019-69-2P, Ethanol, 2-[[2-(5-nitro-2-furyl)-4-quinazolinyl]amino]- 5019-74-9P, 2-Propanol, 1,1'-[[2-(5-nitro-2-furyl)-4-quinazolinyl]imino]di- 5019-79-4P, Ethanol, 2-[1-[2-(5-nitro-2-furyl)-4-quinazolinyl]hydrazino]- 5055-18-5P, Ethanol, 2-[isopropyl[2-(5-noitro-2-furyl)-4-quinazolinyl]amino]- 5055-19-6P, Ethanol, 2-[butyl[2-(5-nitro-2-furyl)-4-quinazolinyl]amino]- 5055-20-9P, Ethanol, 2,2'-[[2-(5-nitro-2-furyl)-4-quinazolinyl]imino]di- 5055-21-0P, 2-Propanol, 1-[(2-hydroxyethyl)[2-(5-nitro-2-furyl)-4-quinazolinyl]amino]- 5055-30-1P, Quinazoline, 4-[(2-methoxyethyl)amino]-2-(5-nitro-2-furyl)- 5055-31-2P, Quinazoline, 4-[(3-methoxypropyl)amino]-2-(5-nitro-2-furyl)- 5055-33-4P, Quinazoline, 4-[bis(2-ethoxyethyl)amino]-2-(5-nitro-2-furyl)- 5085-66-5P, 1-Propanol, 3-[[2-(5-nitro-2-furyl)-4-quinazolinyl]amino]- 5094-03-1P, Ethanol, 2-[methyl[2-(5-nitro-2-furyl)-4-quinazolinyl]amino]- 5489-93-0P, Quinazoline, 4-[(3-morpholinopropyl)amino]-2-(5-nitro-2-furyl)-, dihydrochloride 10460-86-3P, Quinazoline, 4-[(3-morpholinopropyl)amino]-2-(5-nitro-2-furyl)-
RL: PREP (Preparation)
(preparation of)

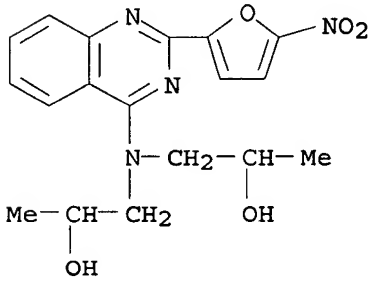
RN 5019-69-2 ZCAPLUS

CN Ethanol, 2-[[2-(5-nitro-2-furanyl)-4-quinazolinyl]amino]- (9CI) (CA INDEX NAME)



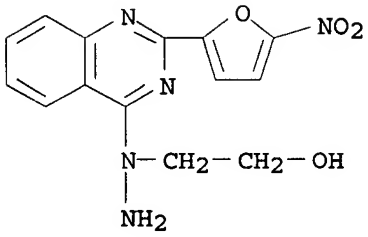
RN 5019-74-9 ZCAPLUS

CN 2-Propanol, 1,1'-[[2-(5-nitro-2-furanyl)-4-quinazolinyl]imino]bis- (9CI) (CA INDEX NAME)

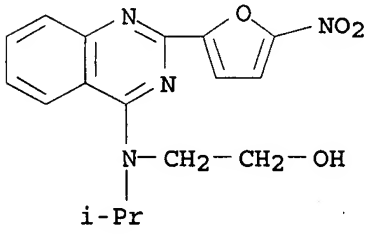


RN 5019-79-4 ZCAPLUS

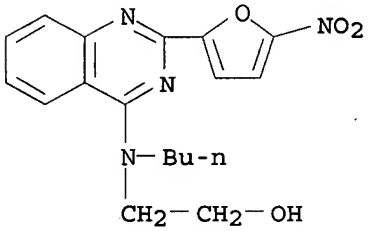
CN Ethanol, 2-[1-[2-(5-nitro-2-furanyl)-4-quinazolinyl]hydrazino]- (9CI) (CA INDEX NAME)



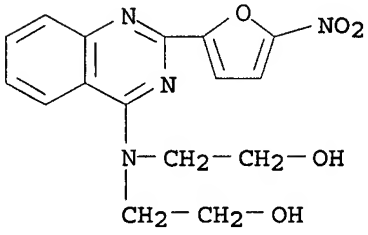
RN 5055-18-5 ZCAPLUS
CN Ethanol, 2-[(1-methylethyl)[2-(5-nitro-2-furanyl)-4-quinazolinyl]amino]- (9CI) (CA INDEX NAME)



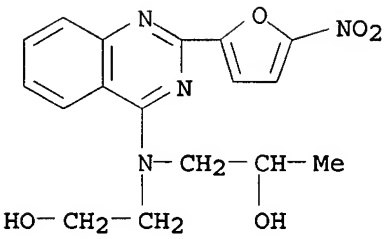
RN 5055-19-6 ZCAPLUS
CN Ethanol, 2-[butyl[2-(5-nitro-2-furanyl)-4-quinazolinyl]amino]- (9CI) (CA INDEX NAME)



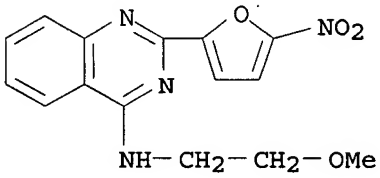
RN 5055-20-9 ZCAPLUS
CN Ethanol, 2,2'-[[2-(5-nitro-2-furanyl)-4-quinazolinyl]imino]bis- (9CI) (CA INDEX NAME)



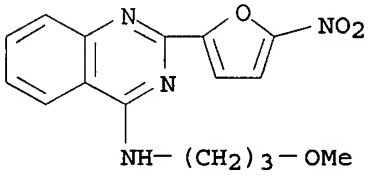
RN 5055-21-0 ZCAPLUS
CN 2-Propanol, 1-[(2-hydroxyethyl)[2-(5-nitro-2-furanyl)-4-quinazolinyl]amino]- (9CI) (CA INDEX NAME)



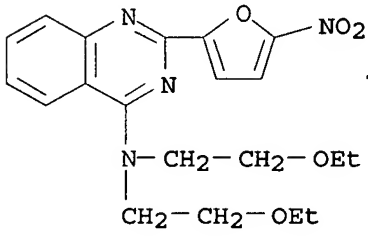
RN 5055-30-1 ZCAPLUS
CN 4-Quinazolinamine, N-(2-methoxyethyl)-2-(5-nitro-2-furanyl)- (9CI) (CA INDEX NAME)



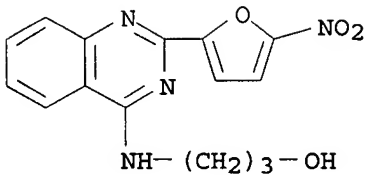
RN 5055-31-2 ZCAPLUS
CN 4-Quinazolinamine, N-(3-methoxypropyl)-2-(5-(nitro-2-furanyl)- (9CI) (CA INDEX NAME)



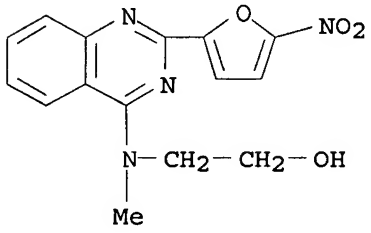
RN 5055-33-4 ZCAPLUS
CN 4-Quinazolinamine, N,N-bis(2-ethoxyethyl)-2-(5-nitro-2-furanyl)- (9CI) (CA INDEX NAME)



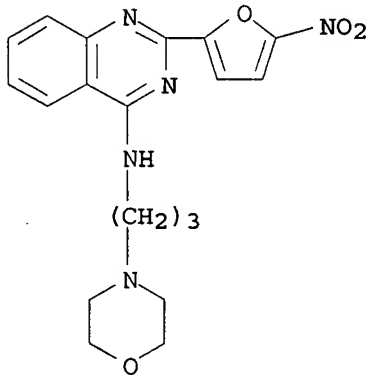
RN 5085-66-5 ZCAPLUS
CN 1-Propanol, 3-[[2-(5-nitro-2-furanyl)-4-quinazolinyl]amino]- (9CI) (CA INDEX NAME)



RN 5094-03-1 ZCAPLUS
CN Ethanol, 2-[methyl[2-(5-nitro-2-furanyl)-4-quinazolinyl]amino]- (9CI) (CA INDEX NAME)

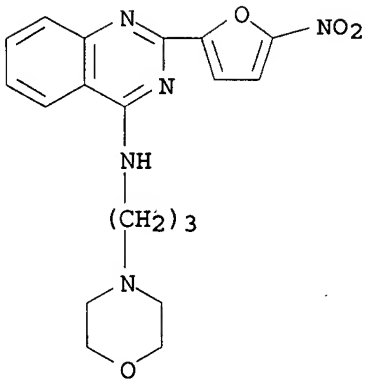


RN 5489-93-0 ZCAPLUS
CN 4-Quinazolinamine, N-[3-(4-morpholinyl)propyl]-2-(5-nitro-2-furanyl)-, dihydrochloride (9CI) (CA INDEX NAME)



●2 HCl

RN 10460-86-3 ZCAPLUS
CN Quinazoline, 4-[(3-morpholinopropyl)amino]-2-(5-nitro-2-furyl)- (7CI, 8CI) (CA INDEX NAME)



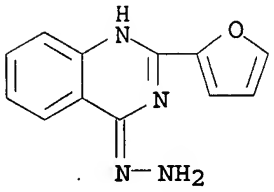
L4 ANSWER 35 OF 40 ZCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1966:403982 ZCAPLUS
DOCUMENT NUMBER: 65:3982
ORIGINAL REFERENCE NO.: 65:710h,711a-d
TITLE: Benzodiazlnes. VI. Synthesis of 2-substituted-4-hydrazinoquinazolines, 5-substituted [3,4-c]-s-triazolo-, and [1,5-c]tetrazoloquinazolines
AUTHOR(S): Postovskii, I. Ya.; Vereschagina, N. N.; Mertsalov, S. L.
CORPORATE SOURCE: S. M. Kirov Ural Polytech. Inst., Sverdlovsk
SOURCE: Khimiya Geterotsiklicheskikh Soedinenii (1966), (1), 130-5
CODEN: KGSSAQ; ISSN: 0132-6244
DOCUMENT TYPE: Journal
LANGUAGE: Russian
GI For diagram(s), see printed CA Issue.
AB cf. CA 63, 13256g. 2-R-substituted quinazol-4-ones (I), -4-chloroquinazolines (II), and -4-hydrazinoquinazolines (III) were prepared Treatment of II with CS(NH2)2 gave the corresponding isothiuronium salts, which on treatment with NaOH gave 2-R-substituted-quinazoline-4-thiones (IV). III with HNO2 gave 5-R-substituted[1,5-c]tetrazoloquinazolines (V), with CH(OEt)3 gave 5-R-substituted[3,4-c]-s-triazoloquinazolines (VI). V treated with HCl gave I (a, R = Me) (b, R = Ph) (c, R = α-furyl) (d, R = γ-pyridyl). Thus, 12.5 g. thioisonicotinamide and 12.5 g. anthranilic acid was heated at 150-60° 1 hr. to give 7.5 g. Id, m. 250° (dioxane). IIa-c were prepared according to Scarborough et al. (CA 57, 7263h). IIa m. 86-8° (heptane); IIb m. 124-6° (heptane); IIc m. 122-4° (heptane). A mixture of 7.5 g. Id, 60 cc. POCl3, and 10 g. PCl5 was boiled 4 hrs., POCl3 distilled, the mixture poured onto ice, neutralized with NH3, and filtered, the precipitate washed with H2O and dried, the residue extracted with boiling C6H6, and the extract filtered and evaporated gave 6.5 g., IId, m. 164-6° (heptane). II (0.02 mole) in C6H6 was stirred and cooled, 5-fold excess NH2NH2.H2O in C6H6 added, and the mixture stirred 2 hrs. gave III. II (0.01 mole), 0.01 mole CS(NH2)2, and 50 cc. EtOH boiled 1 hr. and evaporated, the residue dissolved in NaOH, the mixture filtered, and the filtrate acidified with AcOH gave IV. The following III and IV were prepared (R, III m.p., III % yield, IV m.p., and IV % yield given): Me, 180-2° (CHCl3), 80, 217-18° (EtOH), -; Ph, 214-15° (CHCl3), 81, 216-18° (EtOH), 63; α-furyl, 249-50° (dioxane), 76, 219-20° (dioxane), 85; γ-pyridyl, 200-2° (CHCl3,), 97, -, -. Treatment of IIa with NH2NH2.H2O in EtOH gave 50% N,N'-bis(2-methylquinazolyl)-4-hydrazine (VII), m. 280° (isoPrOH). III (0.002 mole) boiled I hr. with 5-fold excess CH(OEt)3 gave VI. NaNO2 (0.002 mole) was added to 0.002

mole III in 2N HCl at 3-5° and the mixture stirred 1 hr. to give V. V were also prepared by treating II with NaN3 in EtOH. The following VI and V were prepared (R, VI m.p., VI % yield, V m.p., and V % yield given): Me, >280°, 50, 163-5°, 60; Ph, 204-6°, 97, 162-3°, 70; α-furyl, 260-2°, 98, 194-6°, 73; γ-pyridyl, 206-7°, 80, 200-2°, 80. Boiling IV with 15-fold excess NH2NH2.H2O in EtOH until no more H2S evolved (8-10 hrs.) gave III. Treatment of V with HCl (1:1) 3 hrs. gave I. The compds. with R = Me differ considerably from the others, both in color and in stability of the intermediate reaction products.

IT 6505-41-5P, Quinazoline, 2-(2-furyl)-4-hydrazino-
RL: PREP (Preparation)
(preparation of)

RN 6505-41-5 ZCAPLUS

CN Quinazoline, 2-(2-furyl)-4-hydrazino- (7CI, 8CI) (CA INDEX NAME)



L4 ANSWER 36 OF 40 ZCAPLUS COPYRIGHT 2007 ACS on STN

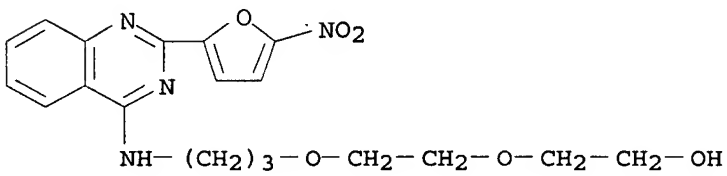
ACCESSION NUMBER: 1966:104206 ZCAPLUS
DOCUMENT NUMBER: 64:104206
ORIGINAL REFERENCE NO.: 64:19608c-d
TITLE: Nitrofuryl heterocycles. IV. 4-Amino-2-(5-nitro-2-furyl)quinazoline derivatives
AUTHOR(S): Burch, Homer A.
CORPORATE SOURCE: Chem. Div., Norwich Pharmacal Co., Norwich, NY
SOURCE: Journal of Medicinal Chemistry (1966), 9(3), 408-10
CODEN: JMCMAR; ISSN: 0022-2623
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 64:104206

AB cf. CA 64, 19596c. Thirty-five 4-(substituted amino)-2-(5-nitro-2-furyl)quinazolines were prepared and found to possess broad in vitro antibacterial activity against a variety of organisms. Several compds. were also active in vivo against Staphylococcus aureus infections. The most active compound contained the 4-bis(2-hydroxyethyl)amino group. A new mol. grouping responsible for enhancing the antibacterial activity of nitrofurans is postulated.

IT 5019-75-0, Ethanol, 2-[2-[3-[[2-(5-nitro-2-furyl)-4-quinazolinyl]amino]propoxy]ethoxy]-
(others at q)

RN 5019-75-0 ZCAPLUS

CN Ethanol, 2-[2-[3-[[2-(5-nitro-2-furanyl)-4-quinazolinyl]amino]propoxy]ethoxy]- (9CI) (CA INDEX NAME)

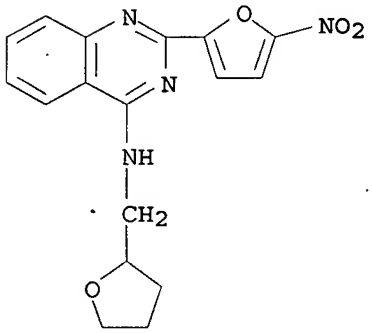


10/ 567,660

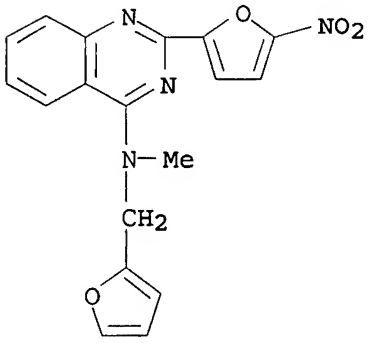
IT 5019-67-0P, Quinazoline, 2-(5-nitro-2-furyl)-4-[(tetrahydrofurfuryl)amino]- 5019-68-1P, Quinazoline, 4-(furfurylmethylamino)-2-(5-nitro-2-furyl)- 5019-69-2P, Ethanol, 2-[[2-(5-nitro-2-furyl)-4-quinazolinyl]amino]- 5019-70-5P, 2-Propanol, 1-[[2-(5-nitro-2-furyl)-4-quinazolinyl]amino]- 5019-71-6P, 1-Propanol, 2-methyl-2-[[2-(5-nitro-2-furyl)-4-quinazolinyl]amino]- 5019-72-7P, 1,2-Propanediol, 3-[[2-(5-nitro-2-furyl)-4-quinazolinyl]amino]- 5019-73-8P, Ethanol, 2-[benzyl[2-(5-nitro-2-furyl)-4-quinazolinyl]amino]- 5019-74-9P, 2-Propanol, 1,1'-[[2-(5-nitro-2-furyl)-4-quinazolinyl]imino]di- 5019-76-1P, Quinazoline, 4-[[2-(diethylamino)ethyl]methylamino]-2-(5-nitro-2-furyl)-, hydrochloride 5019-78-3P, Quinazoline, 4-(1-methylhydrazino)-2-(5-nitro-2-furyl)- 5019-79-4P, Ethanol, 2-[1-[2-(5-nitro-2-furyl)-4-quinazolinyl]hydrazino]- 5055-17-4P, Ethanol, 2-[ethyl[2-(5-nitro-2-furyl)-4-quinazolinyl]amino]- 5055-18-5P, Ethanol, 2-[isopropyl[2-(5-noitro-2-furyl)-4-quinazolinyl]amino]- 5055-19-6P, Ethanol, 2-[butyl[2-(5-nitro-2-furyl)-4-quinazolinyl]amino]- 5055-20-9P, Ethanol, 2,2'-[[2-(5-nitro-2-furyl)-4-quinazolinyl]imino]di- 5055-21-0P, 2-Propanol, 1-[(2-hydroxyethyl)[2-(5-nitro-2-furyl)-4-quinazolinyl]amino]- 5055-23-2P, Quinazoline, 4-[[3-(dimethylamino)propyl]amino]-2-(5-nitro-2-furyl)-, hydrochloride 5055-24-3P, Quinazoline, 4-[[2-(dimethylamino)ethyl]methylamino]-2-(5-nitro-2-furyl)-, hydrochloride 5055-25-4P, Quinazoline, 4-[[2-(diethylamino)ethyl]amino]-2-(5-nitro-2-furyl)-, hydrochloride 5055-28-7P, Quinazoline, 2-(5-nitro-2-furyl)-4-[[3-(1-pyrrolidinyl)propyl]amino]-, hydrochloride 5055-31-2P, Quinazoline, 4-[(3-methoxypropyl)amino]-2-(5-nitro-2-furyl)- 5055-33-4P, Quinazoline, 4-[bis(2-ethoxyethyl)amino]-2-(5-nitro-2-furyl)- 5085-66-5P, 1-Propanol, 3-[[2-(5-nitro-2-furyl)-4-quinazolinyl]amino]- 5094-03-1P, Ethanol, 2-[methyl[2-(5-nitro-2-furyl)-4-quinazolinyl]amino]- 5094-04-2P, Quinazoline, 2-(5-nitro-2-furyl)-4-[[4-(1-pyrrolidinyl)butyl]amino]-, hydrochloride 5118-19-4P, 1,2,3,4,5-Hexanepentol, 6-[methyl[2-(5-nitro-2-furyl)-4-quinazolinyl]amino] 5489-93-0P, Quinazoline, 4-[(3-morpholinopropyl)amino]-2-(5-nitro-2-furyl)-, dihydrochloride 27465-08-3P, Quinazoline, 2-(5-nitro-2-furyl)-4-[[2-(1-pyrrolidinyl)ethyl]amino]-, hydrochloride 27465-09-4P, Quinazoline, 4-[[2-(dimethylamino)ethyl]amino]-2-(5-nitro-2-furyl)-, hydrochloride 27465-10-7P, Quinazoline, 4-[[3-(diethylamino)propyl]amino]-2-(5-nitro-2-furyl)-, hydrochloride
RL: PREP (Preparation)
(preparation of)

RN 5019-67-0 ZCAPLUS

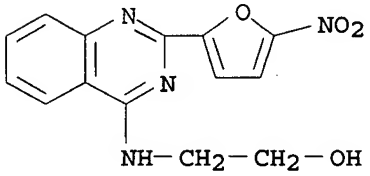
CN 4-Quinazolinamine, 2-(5-nitro-2-furanyl)-N-[(tetrahydro-2-furanyl)methyl]- (9CI) (CA INDEX NAME)



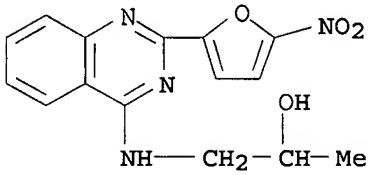
RN 5019-68-1 ZCAPLUS
CN 4-Quinazolinamine, N-(2-furanylmethyl)-N-methyl-2-(5-nitro-2-furanyl)- (9CI) (CA INDEX NAME)



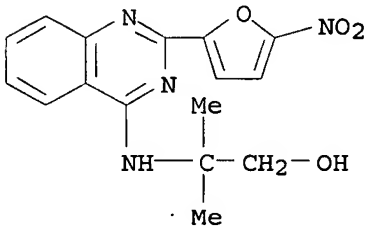
RN 5019-69-2 ZCAPLUS
CN Ethanol, 2-[[2-(5-nitro-2-furanyl)-4-quinazolinyl]amino]- (9CI) (CA INDEX NAME)



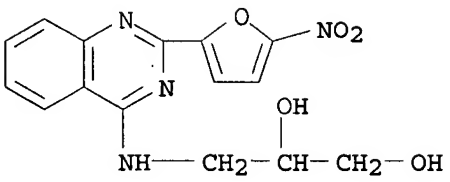
RN 5019-70-5 ZCAPLUS
CN 2-Propanol, 1-[[2-(5-nitro-2-furanyl)-4-quinazolinyl]amino]- (9CI) (CA INDEX NAME)



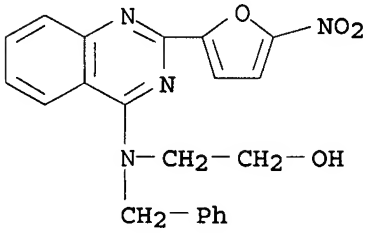
RN 5019-71-6 ZCAPLUS
CN 1-Propanol, 2-methyl-2-[[2-(5-nitro-2-furanyl)-4-quinazolinyl]amino]- (9CI) (CA INDEX NAME)



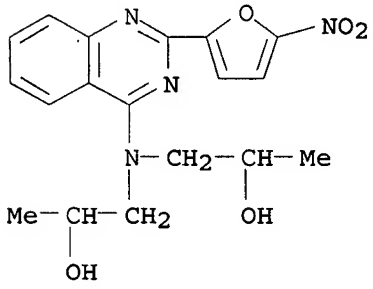
RN 5019-72-7 ZCAPLUS
CN 1,2-Propanediol, 3-[[2-(5-nitro-2-furanyl)-4-quinazolinyl]amino]- (9CI) (CA INDEX NAME)



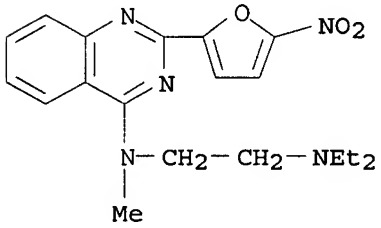
RN 5019-73-8 ZCAPLUS
CN Ethanol, 2-[[2-(5-nitro-2-furanyl)-4-quinazolinyl](phenylmethyl)amino]- (9CI) (CA INDEX NAME)



RN 5019-74-9 ZCAPLUS
CN 2-Propanol, 1,1'-[[2-(5-nitro-2-furanyl)-4-quinazolinyl]imino]bis- (9CI) (CA INDEX NAME)



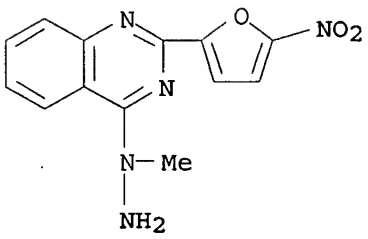
RN 5019-76-1 ZCAPLUS
CN 1,2-Ethanediamine, N,N-diethyl-N-methyl-N-[2-(5-nitro-2-furanyl)-4-quinazolinyl]-, monohydrochloride (9CI) (CA INDEX NAME)



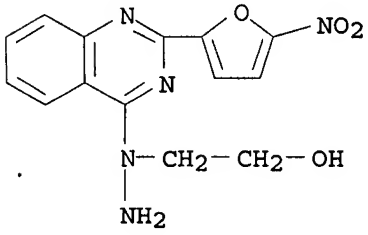
● HCl

RN 5019-78-3 ZCAPLUS
CN Quinazoline, 4-(1-methylhydrazino)-2-(5-nitro-2-furanyl)- (9CI) (CA INDEX

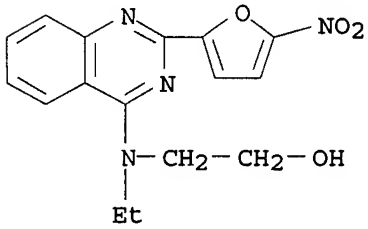
NAME)



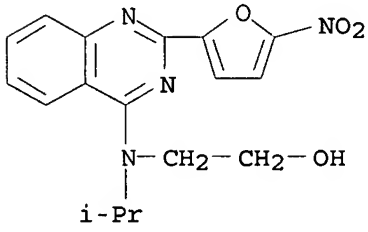
RN 5019-79-4 ZCAPLUS
CN Ethanol, 2-[1-[2-(5-nitro-2-furanyl)-4-quinazolinyl]hydrazino]- (9CI) (CA INDEX NAME)



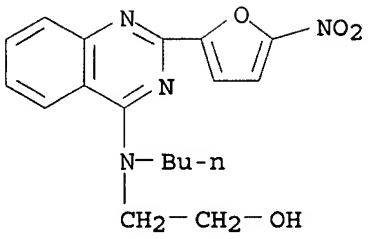
RN 5055-17-4 ZCAPLUS
CN Ethanol, 2-[ethyl[2-(5-nitro-2-furanyl)-4-quinazolinyl]amino]- (9CI) (CA INDEX NAME)



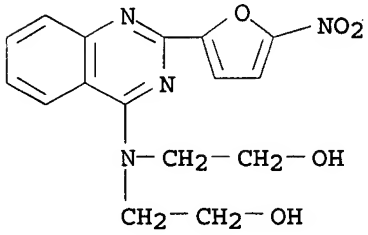
RN 5055-18-5 ZCAPLUS
CN Ethanol, 2-[(1-methylethyl)[2-(5-nitro-2-furanyl)-4-quinazolinyl]amino]- (9CI) (CA INDEX NAME)



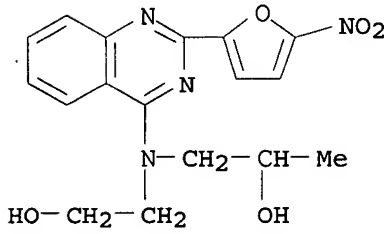
RN 5055-19-6 ZCAPLUS
CN Ethanol, 2-[butyl[2-(5-nitro-2-furanyl)-4-quinazolinyl]amino]- (9CI) (CA INDEX NAME)



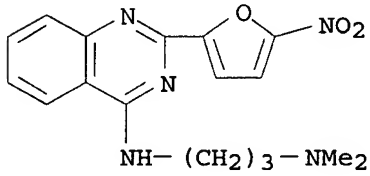
RN 5055-20-9 ZCAPLUS
CN Ethanol, 2,2'-[[2-(5-nitro-2-furanyl)-4-quinazolinyl]imino]bis- (9CI) (CA INDEX NAME)



RN 5055-21-0 ZCAPLUS
CN 2-Propanol, 1-[(2-hydroxyethyl)[2-(5-nitro-2-furanyl)-4-quinazolinyl]amino]- (9CI) (CA INDEX NAME)

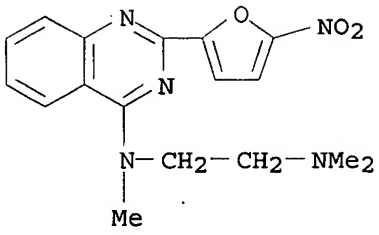


RN 5055-23-2 ZCAPLUS
CN 1,3-Propanediamine, N,N-dimethyl-N'-[2-(5-nitro-2-furanyl)-4-quinazolinyl]-, monohydrochloride (9CI) (CA INDEX NAME)



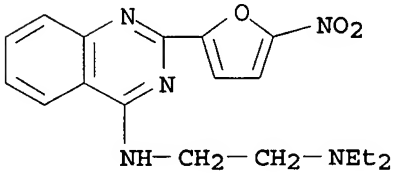
● HCl

RN 5055-24-3 ZCAPLUS
CN 1,2-Ethanediamine, N,N,N'-trimethyl-N'-[2-(5-nitro-2-furanyl)-4-quinazolinyl]-, monohydrochloride (9CI) (CA INDEX NAME)



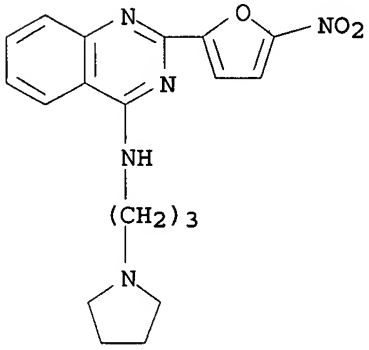
● HCl

RN 5055-25-4 ZCAPLUS
CN 1,2-Ethanediamine, N,N-diethyl-N'-[2-(5-nitro-2-furanyl)-4-quinazolinyl]-, monohydrochloride (9CI) (CA INDEX NAME)



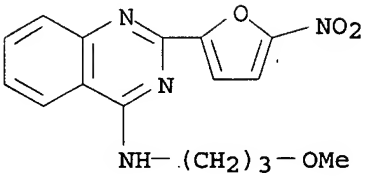
● HCl

RN 5055-28-7 ZCAPLUS
CN 4-Quinazolinamine, 2-(5-nitro-2-furanyl)-N-[3-(1-pyrrolidinyl)propyl]-, monohydrochloride (9CI) (CA INDEX NAME)

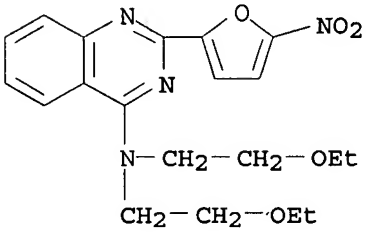


● HCl

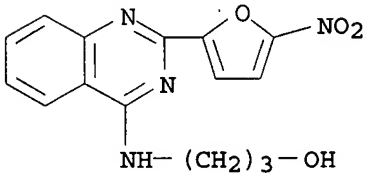
RN 5055-31-2 ZCAPLUS
CN 4-Quinazolinamine, N-(3-methoxypropyl)-2-(5-(nitro-2-furanyl)- (9CI) (CA INDEX NAME)



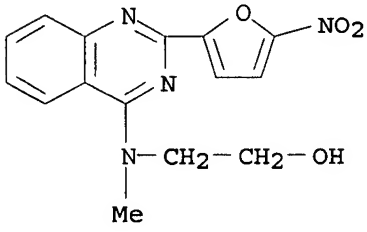
RN 5055-33-4 ZCAPLUS
CN 4-Quinazolinamine, N,N-bis(2-ethoxyethyl)-2-(5-nitro-2-furanyl)- (9CI) (CA INDEX NAME)



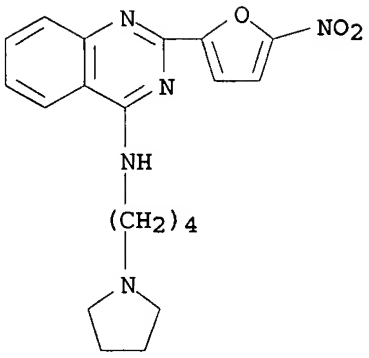
RN 5085-66-5 ZCAPLUS
CN 1-Propanol, 3-[[2-(5-nitro-2-furanyl)-4-quinazolinyl]amino]- (9CI) (CA INDEX NAME)



RN 5094-03-1 ZCAPLUS
CN Ethanol, 2-[methyl[2-(5-nitro-2-furanyl)-4-quinazolinyl]amino]- (9CI) (CA INDEX NAME)

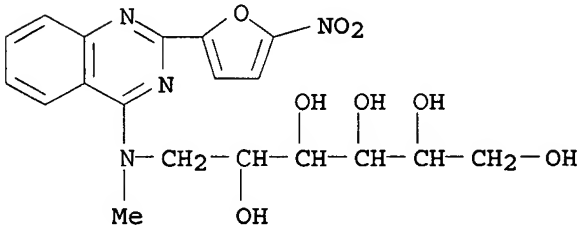


RN 5094-04-2 ZCAPLUS
CN 4-Quinazolinamine, 2-(5-nitro-2-furanyl)-N-[4-(1-pyrrolidinyl)butyl]-, monohydrochloride (9CI) (CA INDEX NAME)

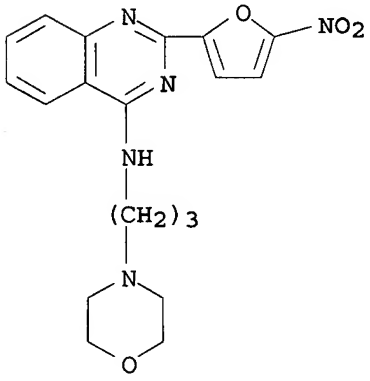


● HCl

RN 5118-19-4 ZCAPLUS
CN Hexitol, 1-deoxy-1-[methyl[2-(5-nitro-2-furanyl)-4-quinazolinyl]amino]-
(9CI) (CA INDEX NAME)

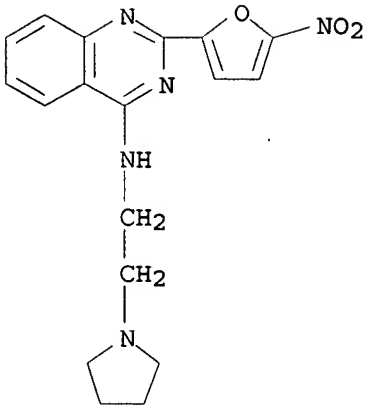


RN 5489-93-0 ZCAPLUS
CN 4-Quinazolinamine, N-[3-(4-morpholinyl)propyl]-2-(5-nitro-2-furanyl)-,
dihydrochloride (9CI) (CA INDEX NAME)



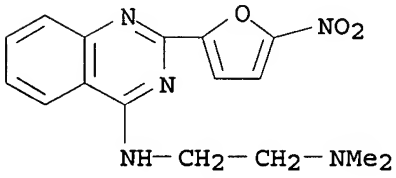
●2 HCl

RN 27465-08-3 ZCAPLUS
CN Quinazoline, 2-(5-nitro-2-furyl)-4-[[2-(1-pyrrolidinyl)ethyl]amino]-,
hydrochloride (7CI, 8CI) (CA INDEX NAME)



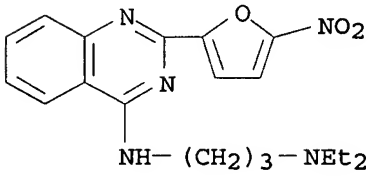
●x HCl

RN 27465-09-4 ZCAPLUS
CN Quinazoline, 4-[[2-(dimethylamino)ethyl]amino]-2-(5-nitro-2-furyl)-, hydrochloride (7CI, 8CI) (CA INDEX NAME)



●x HCl

RN 27465-10-7 ZCAPLUS
CN Quinazoline, 4-[[3-(diethylamino)propyl]amino]-2-(5-nitro-2-furyl)-, hydrochloride (7CI, 8CI) (CA INDEX NAME)



●x HCl

L4 ANSWER 37 OF 40 ZCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1951:21795 ZCAPLUS
DOCUMENT NUMBER: 45:21795

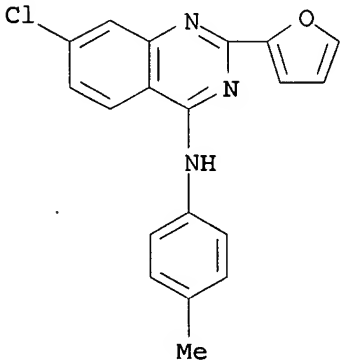
10/ 567,660

ORIGINAL REFERENCE NO.: 45:3852g-i,3853a
TITLE: Furylquinazolines. IV. Nucleophilic reactivity of the 2-furyl-4-alkoxyquinazolines
AUTHOR(S): Andrisano, R.; Modena, G.
CORPORATE SOURCE: Univ. Bologna, Italy
SOURCE: Bollettino Scientifico della Facolta di Chimica Industriale di Bologna (1950), 8, 7-9
CODEN: BSFCAY; ISSN: 0366-3205
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable

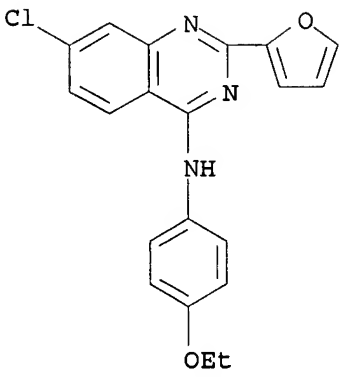
AB cf. preceding abstract 2-Furyl-4-chloroquinazoline (I) (C.A. 45, 1600f), refluxed for 0.5 hr. with 0.05 atom Na in 20-30 cc. of an aliphatic alc., poured into H2O after cooling, and extracted with Et2O, yields the corresponding 4-alkoxy derivative Thus, the following 2-furyl-4-alkoxyquinazolines (II) are prepared: MeO, prisms from ligroin, m. 65° (picrate, prisms from EtOH, m. 170°); EtO, needlelike prisms from ligroin, m. 83° (picrate, prisms from EtOH, m. 183.4°); PrO, characterized as the picrate, needlelike prisms from EtOH, m. 143.5°; iso-PrO, characterized as the picrate, prisms from EtOH, m. 164°. Similarly, by refluxing 0.02 mol. I, 0.05 atom Na, 8 cc. PhCH2OH, and 20 cc. dioxane for 1 hr. was prepared 2-furyl-4-benzyloxyquinazoline (III), oil, characterized as the picrate, prisms from EtOH, m. 171°. Also, 2-furyl-4-phenoxyquinazoline (IV), prisms from ligroin, m. 135°. These compds. are hydrolyzed to 2-furyl-4-hydroxyquinazoline by refluxing with aqueous NaOH until they are completely dissolved; the rate of hydrolysis decreases in the order II > IV > III. Refluxing II, III, or IV with a Na alcoholate in the corresponding alc. or in dioxane yields the corresponding 4-alkoxy derivative In general, II are converted to their higher or lower homologs; IV easily yields II and III, but is not formed by this reaction. IV (3.3 g.) and 3 g. Et2N(CH2)3CHMeNH2 heated at 150° for 1.5 hrs., washed with 10% aqueous NaOH, and distilled in vacuo, yield 2-furyl-4-(5-diethylamino-2-pentylamino)quinazoline, characterized as the picrate, needles from EtOH, m. 179°.

IT 858236-39-2P, Quinazoline, 7-chloro-2-(2-furyl)-4-p-toluidino-
858236-41-6P, Quinazoline, 7-chloro-2-(2-furyl)-4-phenetidino-
860191-81-7P, Quinazoline, 4-(anisidino)-7-chloro-2-(2-furyl)-
RL: PREP (Preparation)
(preparation of)

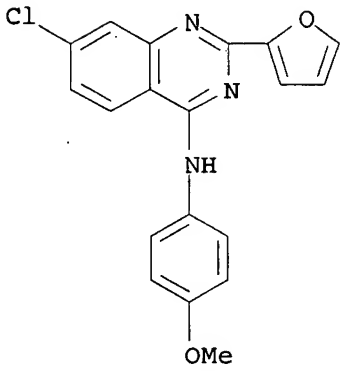
RN 858236-39-2 ZCAPLUS
CN Quinazoline, 7-chloro-2-(2-furyl)-4-p-toluidino- (5CI) (CA INDEX NAME)



RN 858236-41-6 ZCAPLUS
CN Quinazoline, 7-chloro-2-(2-furyl)-4-phenetidino- (5CI) (CA INDEX NAME)



RN 860191-81-7 ZCAPLUS
CN Quinazoline, 4-(anisidino)-7-chloro-2-(2-furyl)- (5CI) (CA INDEX NAME)

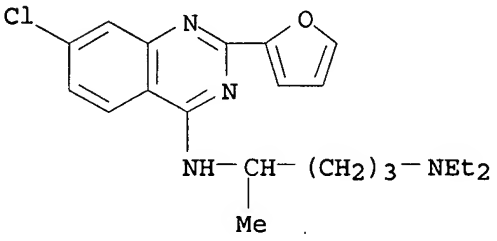


L4 ANSWER 38 OF 40 ZCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1951:21794 ZCAPLUS
DOCUMENT NUMBER: 45:21794
ORIGINAL REFERENCE NO.: 45:3852c-g
TITLE: Furylquinazolines. III. 4-Substituted 2-furyl-4-chloroquinazolines
AUTHOR(S): Andrisano, R.; Modena, G.
CORPORATE SOURCE: Univ., Bologna, Italy
SOURCE: Gazzetta Chimica Italiana (1950), 80, 321-4
CODEN: GCITA9; ISSN: 0016-5603
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
OTHER SOURCE(S): CASREACT 45:21794
AB cf. C.A. 45, 1601d; following abstract In view of the high anti-malarial power of 4-(4-diethylamino-1-methylbutylamino)-7-chloroquinazoline (cf. Price, et al., C.A. 40, 5747.4), its 2-(2-furyl) derivative (I) was prepared 4,2-Cl(H2N)C6H3CO2H (10 g.) and 12 g. Et 2-furancarboximidate [cf. Ber. 25, 1416(1892)], heated 2 hrs. at 200°, the product taken up in MeOH, filtered, and the residue purified by AcOH, yield 2-(2-furyl)-4-hydroxy-7-chloroquinazoline (II), m. 276°. II (10 g.) in 80 cc. POCl3 and 14 g. PCl5, refluxed 90 min., distilled in vacuo, the residue taken up in ice water, neutralized with NH4OH, filtered, and the residue extracted with C6H6, yields 9.5 g. (88%) of 2-(2-furyl)-4,7-dichloroquinazoline (III), m. 137°. III (5.3 g.) and 6.4 g. H2NCHMeCH2CH2CH2NEt2 in 80 cc. C6H6, neutralized by Na2CO3, refluxed 3 hrs., and the product steam-distilled, yield almost 100 % I, m. 112°. With alc. picric acid, it forms a picrate, C33H33O15N10Cl, m. 199°.

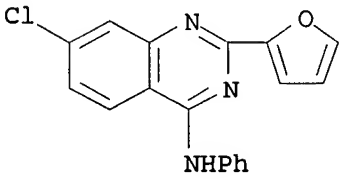
Since the Cl in the 4-position in III, like that in the chloroquinazolines already described (cf. C.A. 45, 1600f) is reactive with nucleophilic agents, 6 compds. were prepared by replacement of the Cl. III (0.01 mol.) and NaOMe (from 0.03 atom Na in 40 cc. MeOH), refluxed 30 min., diluted with water, and the precipitate purified by ligroin, yields 2-(2-furyl)-4-methoxy-7-chloroquinazoline, m. 130°. III (0.01 mol.) in 20 cc. dioxane and NaOPh (from 0.03 atom Na in 12 g. PhOH), refluxed 30 min., poured into water, NaOH added, and the precipitate purified by aqueous EtOH, yield 100% of the 4-phenoxy analog, m. 140°. Four arylamino derivs. were prepared in high yields by refluxing 0.01 mol. III and 0.02 mol. of the resp. arylamine 1 hr. in C6H6, making alkaline with Na2CO3, and steam-distilling 2-(2-Furyl)-4-phenylamino-7-chloroquinazoline, m. 170° (from EtOH); 4-tolylamino analog, m. 201° (from ligroin); 4-methoxyphenylamino analog, m. 189° (from EtOH); 4-ethoxyphenylamino analog, m. 180° (from EtOH).

IT 858235-29-7P, Quinazoline, 7-chloro-4-(4-diethylamino-1-methylbutylamino)-2-(2-furyl)- 860191-83-9P, Quinazoline, 4-anilino-7-chloro-2-(2-furyl)-
RL: PREP (Preparation)
(preparation of)

RN 858235-29-7 ZCAPLUS
CN Quinazoline, 7-chloro-4-(4-diethylamino-1-methylbutylamino)-2-(2-furyl)- (5CI) (CA INDEX NAME)



RN 860191-83-9 ZCAPLUS
CN Quinazoline, 4-anilino-7-chloro-2-(2-furyl)- (5CI) (CA INDEX NAME)



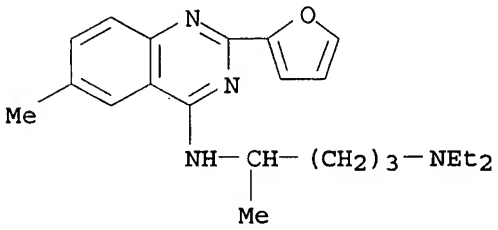
L4 ANSWER 39 OF 40 ZCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1951:8789 ZCAPLUS
DOCUMENT NUMBER: 45:8789
ORIGINAL REFERENCE NO.: 45:1601c-g
TITLE: Furylquinazolines. II. 4-Substituted 2-furyl-6-methylquinazolines
AUTHOR(S): Andrisano, R.; Modena, G.
CORPORATE SOURCE: Univ., Bologna, Italy
SOURCE: Bollettino Scientifico della Facolta di Chimica Industriale di Bologna (1950), 8, 1-3
CODEN: BSFCAY; ISSN: 0366-3205
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
AB cf. preceding abstract 5,2-Me(H2N) C6H3CO2Me (22 g.) and 24 g. Et

2-furanacetimidate (cf. Pinner, Ber. 25, 1416(1892)), heated at 200° for 1.5 hrs., taken up in MeOH after cooling, filtered, washed, and dried, yield 18.5 g. (61%) 2-furyl-4-hydroxy-6-methylquinazoline (I), silky needles from EtOH, m. 257°. I (16.8 g.) is refluxed with 100 cc. POCl3 and 24 g. PCl5 for 1.5 hrs., the excess POCl3PCl5 removed under reduced pressure, the residue taken up with H2O and ice, neutralized with NH4OH, filtered, washed, and dried to yield after recrystn. from C6H6 14 g. (77%) 4-Cl analog (II), prisms from ligroin, m. 144°. Refluxing 5 g. II and 6.5 g. Et2N(CH2)3CHMeNH2 in 75 cc. C6H6, and removing the C6H6 and excess base with steam gives in almost quant. yield the 4-(5-diethylamino-2-pentylamino) analog, needles, b9 280°, m. 144° (from ligroin); picrate, needles from EtOH, m. 180°. II (0.01 mol.), refluxed with 0.03 atom Na in 40 cc. MeOH for 0.5 hr. and poured into H2O, yields almost quantitatively the 4-MeO analog, colorless prisms from ligroin, m. 116°. Similarly, 0.01 mol. II, 0.03 atom Na, and 12 g. PhOH in 20 cc. dioxane give the 4-PhO analog, colorless prisms from ligroin, m. 141°. The following 2-furyl-4-arylamino-6-methylquinazolines are obtained in almost quant. yield by refluxing 0.01 mol. II with 0.02 mol. of the corresponding arylamine in 40 ml. C6H6, making alkaline with Na2CO3, and removing the solvent and excess amine with steam: PhNH, needles from aqueous EtOH, m. 180°; MeC6H4NH, needles from EtOH, m. 140°; p-MeOC6H4NH, needles from ligroin, m. 156°; p-EtOC6H4NH, silky needles from MeOH, m. 126°.

IT 857760-27-1P, Quinazoline, 4-(4-diethylamino-1-methylbutylamino)-2-(2-furyl)-6-methyl- 860191-75-9P, Quinazoline, 4-(anisidino)-2-(2-furyl)-6-methyl- 860720-50-9P, Quinazoline, 4-anilino-2-(2-furyl)-6-methyl-
RL: PREP (Preparation)
(preparation of)

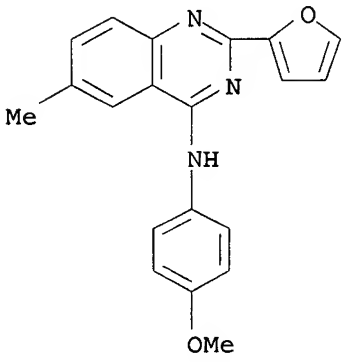
RN 857760-27-1 ZCAPLUS

CN Quinazoline, 4-(4-diethylamino-1-methylbutylamino)-2-(2-furyl)-6-methyl- (5CI) (CA INDEX NAME)

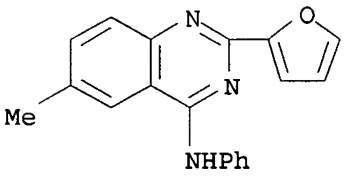


RN 860191-75-9 ZCAPLUS

CN Quinazoline, 4-(anisidino)-2-(2-furyl)-6-methyl- (5CI) (CA INDEX NAME)



RN 860720-50-9 ZCAPLUS
CN Quinazoline, 4-anilino-2-(2-furyl)-6-methyl- (5CI) (CA INDEX NAME)



L4 ANSWER 40 OF 40 ZCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1951:8788 ZCAPLUS
DOCUMENT NUMBER: 45:8788
ORIGINAL REFERENCE NO.: 45:1600f-i,1601a-c
TITLE: Furylquinazolines. I. 4-Substituted 2-furylquinazolines
AUTHOR(S): Andrisano, Renato; Modena, G.
CORPORATE SOURCE: Univ. Bologna, Italy
SOURCE: Gazzetta Chimica Italiana (1950), 80, 228-33
CODEN: GCITA9; ISSN: 0016-5603
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable

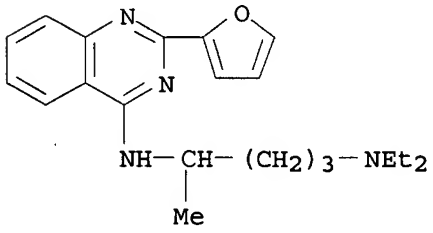
AB cf. following abstract In view of the plasmocidal action of quinazoline derivs. containing a pentylamine side chain (cf. Endicott, et al., C.A. 40, 5748.3; Price, et al., C.A. 40, 5747.4), some 2-furylquinazoline derivs. were prepared to study their anti-malarial activity and the comparative influence on their pharmacol. properties of the Ph and furan ring in the quinazoline nucleus. o-H2NC6H4CO2Me (20 g.) and 20 g. OC4H3C(:NH)OEt [cf. Ber. 25, 1416(1892)], heated 3 hrs. at 210-20°, taken up in MeOH, filtered, and the residue purified by EtOH, yields 74% of 2-furyl-4-hydroxyquinazoline (I), m. 220°. Also, 10.3 g. o-H2NC6H4CO2H and 9.5 g. OC4H3C(:S)NH2 [Hantzsch, Ber. 25, 1314(1892)], heated at 150° until no more H2S is evolved, and the product treated as before, yield approx. 74% I. I (10 g.) in 80 cc. POCl3 and 14 g. PCl5, heated 100 min. (no temperature given), distilled in vacuo, the residue neutralized with NH4OH, mixed with ice water, and the crystallized product dried and extracted with C6H6, yield 9 g. (80%) of 2-furyl-4-chloroquinazoline (II). Hydrolysis by 5% alc. KOH yields I. II (4.1 g.) and 5 g. H2NCHMe(CH2)3NEt2 in 60 cc. C6H6, refluxed 3 hrs., made alkaline with Na2CO3, and steam-distilled, leave a pasty residue which could not be crystallized even after distillation in vacuo (b16 286°). However, with alc. picric acid it formed, after purification by EtOH, a dipicrate, C33H34O15N10, m. 179°, and with H3PO4 a monohydrated diphosphate, C21H36O10N4P2, m. 210°. The wts. of these corresponded to an almost 100% yield of 2-furyl-4-(4-diethylamino-1-methylbutylamino)quinazoline (III). III is also formed by the same procedure, but in the presence of PhOH without solvent. II (0.01 mol.) and alc. NaOMe (from 0.03 atom Na in 40 cc. MeOH), refluxed 1 hr., diluted with water, extracted with Et2O, the extract evaporated, and the oil residue distilled in vacuo (b16 212°), give, after purification by ligroin, a good yield of 2-furyl-4-methoxyquinazoline, m. 65°. II (0.01 mol.) and NaOPh (from 0.03 atom Na, 12 g. PhOH, and 20 cc. dioxane), refluxed 1 hr., poured into water, and NaOH added, give, after purification by ligroin, almost 100% of 2-furyl-4-phenoxyquinazoline (IV), m. 135°. Alc. II, treated while refluxing with anhydrous NH3 for 1 hr., diluted with water, and the precipitate purified by EtOH, yields almost 100% 2-furyl-4-aminoquinazoline, m. 225°. II (0.01 mol.) in C6H6 and 0.02 mol. of

arylamine in 40 cc. C6H6, refluxed 1 hr., made alkaline with Na2CO3, steam-distilled, and the residues purified by EtOH, yielded almost 100% of the following 2-furyl-4-(arylamino)quinazolines: NHPh, m. 115°; NHC6H4Me, m. 133°; NHC6H4OMe, m. 110°; NHC6H4OEt, m. 105°. The extreme reactivity of the Cl in II is similar to the behavior of Cl in 2,4,1-(O2N)2C10H5Cl (cf. Mangini and Frenguelli, C.A. 32, 1258.3) and the Cl in 4-chloroquinazoline (cf. Tomisek and Christiensen, C.A. 32, 1259.1). This is in harmony with the theory of Bonino and the expts. of Mangini and Frenguelli (Atti accad. sci. Bologna [10] 1, 201(1944); C.A. 33, 5398.6), and of the pharmacol. expts. of Erlenmeyer (C.A. 41, 1671g) concerning the analogy between the heterocyclic N atom and the aromatic CNO2 group, which, by strongly polarizing the electronic cloud in relation to the nuclear CCl group, increase the tendency toward replacement of the Cl.

IT 857760-25-9, Quinazoline, 4-(4-diethylamino-1-methylbutylamino)-2-(2-furyl)-
(and derivs.)

RN 857760-25-9 ZCAPLUS

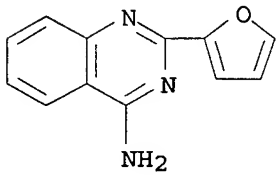
CN Quinazoline, 4-(4-diethylamino-1-methylbutylamino)-2-(2-furyl)- (5CI) (CA INDEX NAME)



IT 40172-85-8P, Quinazoline, 4-amino-2-(2-furyl)-
157863-04-2P, Quinazoline, 4-anilino-2-(2-furyl)-
860191-77-1P, Quinazoline, 4-(anisidino)-2-(2-furyl)-
RL: PREP (Preparation)
(preparation of)

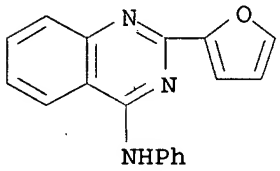
RN 40172-85-8 ZCAPLUS

CN 4-Quinazolinamine, 2-(2-furanyl)- (9CI) (CA INDEX NAME)



RN 157863-04-2 ZCAPLUS

CN 4-Quinazolinamine, 2-(2-furanyl)-N-phenyl- (9CI) (CA INDEX NAME)



RN 860191-77-1 ZCAPLUS

CN Quinazoline, 4-(anisidino)-2-(2-furyl)- (5CI) (CA INDEX NAME)